THE GENESEE FARMER.

Agriculture is the most Healthy and Honorable, as it is the most Natural and Useful pursuit of Man.

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ON FATTENING DOMESTIC ANIMALS.

In an admirable lecture before the Society of Arts, Mr. Mechi, of England, says: "I believe it is the great quantity of stock kept that enables the Lothian farmer to compete at so great a distance with the south-country farmer; and I believe it is the still greater quantity of stock kept by Mr. McCulloch, of Auchness, that enabled him to surpass the Lothian farmers. Mr. Lawes has shown most indisputably, in his admirable papers in the Royal Agricultural Society's Journals, that we can produce manure cheaper and better by feeding stock than by purchasing guano."

The economical production of beef, pork, and mutton, and thereby securing a large increase of manure, is an object of the first importance on every well managed farm. A great many cultivators in this country have yet to learn that it is quite as easy to consume and finally exhaust the fertilizing elements in the subsoil, by deep tillage and selling all the crops, as it is to impoverish the surface soil by shallow plowing and sending the cream of the land to distant markets. Both practices are part and parcel of the same unwise system of agriculture. Each cubic foot of the reader's soil will weigh 100 pounds on an average—some more, some less—exclusive of water or moisture. If it contains one part in 1600 of potash, it is better in that regard than the average of land twenty-five years in cultivation. As there are 1600 ounces in 100 pounds, of course a fair soil contains but an ounce of potash in a cubic foot; and of this not over a dram, or the eighth of an ounce, is available for any one crop, or perhaps for any five, owing to the circumstance that seven-eighths of this alkali exists in the same condition in the earth that potash, soda, and lime occupy in window-glass, *i. e.*, it exists in the shape of an insoluble silicate of potash. Now, it matters not what food is fed to animals, very little of the potash, and less of the soluble silica taken out of the soil in such food, remains in the system. These, and other earthy elements of crops, appear in the droppings or excretæ, and can be restored to the ground whence they were extracted. But if a dram of potash is sent to market in hay, potatoes, grain, or other products, from each cubic foot of soil, or if it be wasted at home, how is the farmer to replace that quantity of alkali in every cubic foot of his impoverished fields? Very few of our readers have any just appreciation of the intrinsic value of the raw material of human food and raiment.

Mr. Mechi says that a million tons of oil-cake are imported into England every year; and in a recent debate in Parliament, on the question of allowing the out-going tenant a fair compensation for unexpended manure applied to land, it was decided by a vote of the House, that the manure made from a ton of oil-cake is worth half the cost of the cake. A motion to regard the manure made by grain at half the cost of the grain, was first carried, then re-considered and lost. We should have voted in the affirmative on both of the above questions—denying the right of any tenant or landlord to remove more of the earthy elements of bread and meat from the soil than he applied to it. The natural fruitfulness of the earth, whether the estate be entailed or not, belongs to no one generation exclusively; therefore, to rob the earth of its phosphorus, potash, magnesia, soda, and chlorine, is an obvious wrong which can be justified only on the ground of an immediate and pressing necessity.

It is now the great business of American canals, railroads, river, lake, and foreign commerce, to convey to distant markets the raw material of cotton, grain, and provisions, drawn from one hundred million acres of virgin soil. When our turn comes to seek a million tons of oil-cake worth $15 a ton for manure, where shall we find it? So long as our subsoils abound in the elements of wheat and cotton, deep plowing, subsoiling, and growing clover, will bring them to the surface; but after the bone-earth and potash are finally consumed in staples sent to the sea-board, or are dissolved by tillage and washed into creeks, rivers, and lakes—*what then?* Then, and we fear not before, we shall begin to fatten neat cattle, hogs, and sheep, in a way to save every particle of their droppings, by feeding them on open floors with a tight basement.

Speaking of this open-floor and cellar arrangement, Mr. Mechi remarks: "Experience has taught me, and will teach others, in order to succeed in farming, we must produce a much larger quantity of meat on our farms than at present, and at less cost. In order to do this, it becomes necessary to consume a large portion of the straw of the farm, cut into chaff, and *cook it with meal and ground oil-cake.* We are thus deprived of the usual cattle-bedding, and must find a substitute. Having practiced the system rather extensively, I will communicate to you the details; observing that although attended, as every system must be, with certain disadvantages, the balance of benefit is sufficiently considerable to induce me to

continue and extend it. The quantity of stock I now have on boards (slats) is, 100 lambs, 50 sheep, 60 calves, 30 bullocks, 10 cows, and 200 pigs. I measured the hoofs of the various animals, and arranged my openings accordingly. For bullocks, the space between the slats or boards is 1⅞ inches; sheep, 1¼ inches; pigs, ditto; small pigs and lambs, 1 inch; calves, 1⅜ inches.

"One can not too highly appreciate the system on heavy lands, where animals can not be profitably folded during winter. The area allowed to each animal and its feeding apparatus, is thus:

	Superficial feet.
Small sheep,	8
Large do.	10
Small bullocks,	30 to 40
Large do.	50 to 60
Small pigs,	6 to 8
Large do.	9 to 11

"Very much depends on the season and weather. In cold weather, pigs and bullocks can scarcely be packed too close, so long as there is room for them to lie down comfortably. Sheep require a little more room and ventilation. In fact it requires a nice observation to adjust the ventilation and temperature. This is best done by a thermometer, because our own feelings are not always a sufficient criterion. Every cattle shed should feel as comfortable and warm as a drawing room. The opening for ventilation should be at the highest point. My bullocks are groomed daily by a boy, whose sole occupation it is. The cost is about one farthing a head per week, and I am sure it pays. [Pays the owner of the cattle, but not the boy.] Before I leave the open boards, I should say that the bars or planks may be either of straight yellow deals [pine] or straight-grained hard wood. The latter are to be preferred for heavy animals, as they wear off the edges of deals. I should say that we never sweep the floor; but the animals are perfectly clean. Of course the manure is taken out at once to the field, without the interventional expense of a double carting, shooting, or turning over a dung heap. The effect on the crops is unmistakable. I am quite sure the system is very advantageous. It is true we like a soft bed, and so do animals; but our medical advisers recommend a hard one.

"There is a powerful development of muscles on boards — so much so, that with fattening pigs not bred on boards, I have found some of them get capped hocks. It is surprising how fast you may fatten your pigs on these floors. They find it inconvenient to run about, so divide their time between eating and sleeping—a most agreeable operation for the account book. My old bailiff admits that, on the turning-out system, two-thirds of my farm would be required to feed my animals; now they make shift with one-third. If you desire a good appetite for your animals, turn them out in the cold for exercise. On asking the boy how they got on, he replied: 'Oh, sir, they get on properly well now, they come in so hungry.' This settled the question in my mind; but those who doubt the facts, can make experiments. There can be no doubt the animals are perfectly healthy on these boards. Considering the confinement and heat, this rather surprises me, especially with pigs fed entirely on meal; for the ammonia or effluvia from under them, is powerful enough to discolor paint. The great difficulty I find, is in getting a proper fixer of ammonia. I have used sulphuric acid, ashes, and various matters, with a certain effect. I hope the Irish peat charcoal will not be too dear; I have a ton coming on trial. After all, I am inclined to think common salt, or the common dried clay, is the cheapest fixer, and I have used a great deal."

Well dried and finely pulverized clay is one of the best and cheapest absorbents of the gases from the dung heap. In preparing nightsoil for transportation, the Chinese have used dried clay for unknown ages. To escape the attacks of flies, which in summer are very troublesome to cattle, Mr. MECHI keeps his stables dark. He says, "if you have ten million of flies, not one will bite in the dark." Mr. M. has a steam engine for grinding coarse grain, cutting straw and turneps, and steaming food.

Of course, if all farmers were to go extensively into the production of meat, the market would soon be overstocked and the article become valueless; but there is little danger of such a result. It is too easy to skin the soil, as immense herds of buffaloes are slaughtered for their hides and tongues alone, for many to engage in any system of farming which restores in manure as much of the elements of fertility as is removed in crops. To purchase oil-cake or guano enough to form 100 bushels of wheat or corn for every 100 sold off the farm, is a policy not soon to come into general favor in this country. But after the virgin earth has parted with the raw material for making bread and meat, to the depth of two feet, then we shall begin to consider the supreme folly of wasting fertilizers enough every year, as we now do, to form one thousand million bushels of corn. This immense loss is not likely to be any less during the next twenty-five years; and it will tell most against the deepest tilled land, which now yields the best crops, provided their earthy elements are not restored to it. Unless it can be shown that each cubic foot of soil contains an unlimited quantity of *bones*, or the material to form them, it is easy to see that, to be ever extracting phosphate of lime in grass, grain, roots, cotton, hemp, sugar-cane, and tobacco, and sending these products off the farm, must inevitably consume all the bone-earth in the soil, within the reach of any cultivated plants. Whatever minerals American soils lose by leaching and in crops, must some day be restored to it, if not from Great Britian, from the great deep, or some other source. We can no better afford to cultivate 100 acres to grow 1000 bushels of wheat, than the farmers of England can. Why, then, should we not attempt to increase our average crops to twice the quantity per acre now harvested? This can only be done by augmenting the fertility of wheat fields; and how can this be effected better than to pass grain, roots, and grass, through meat-producing machinery — selling the meat, and adding the manure to the land that needs it?

The different results obtained by feeding corn to hogs and neat cattle in different parts of the United States, are quite curious and instructive. We have before us a letter from Mr. J. E. DODGE, of Potosi, Grant county, Wisconsin, who says: "In October last, I selected from my stock two pigs of the same age, and apparently alike thrifty; one, however, weighed 260 lbs., and the other 247 lbs. Immediately after being weighed, they were put in different apartments of the same house, kept dry and warm, and fed with great care forty days, when they were weighed and slaughtered. The heaviest pig was fed with corn meal mixed stiff with cold water; the other with shelled corn, with a plenty of pure water to drink. The one fed with meal consumed 425 lbs.,

and gained 63 lbs. live weight; the pork weighed, after dressing, 267 lbs. The other ate 308 lbs. of corn, and was found to have gained only 33 lbs. in live weight; his pork weighed 231 lbs. By subtracting the pork weight from the live weight, the amount of offal is ascertained, which in this experiment proved a fraction less than one-fifth of the live weight. If one-fifth be deducted from the amount each pig gained, we then have the true gain in pork produced, which was 6¾ lbs. for every 56 lbs. of corn. The pigs were a cross between the Byefield and Berkshire—the best and most profitable breeds. The corn the yellow dent or Cleveland, a variety held here in great esteem."

We confess the above statements, the truth of which we have no reason to question, surprize us. The pig fed on dry corn gave only a pound of pork for 11½ lbs. of corn. Had this meat been made in Georgia, where corn is now selling at two cents a pound, or at $1.12 a bushel, it would have cost 23 cents a pound! Allowing the manure to have been one-fourth the price of the corn, (it is estimated at two prices,) and still the pork cost 17 cents a pound. The other pig did a little better on meal. His pork cost 8 lbs. 5 oz. of meal per lb., which is too much by half to have pork-making profitable. Mr. HENRY ELLSWORTH, former Commissioner of Patents, produced pork at the rate of 100 lbs. of meat to 350 of corn *cooked*; but, about five to one is the relation that grain bears to the meat.

Eight thousand circular letters from the Patent Office have been sent into every county and parish in the Union, besides being published in a number of agricultural journals, containing the following among other questions: "How many pounds of beef will 100 lbs. of corn produce?" Most of the answers come from Ohio and Kentucky, and the quantity stated ranges from 10 to 20 lbs. of beef for 100 of corn; the average is about 16. If any reader of the Farmer has any facts in regard to feeding sheep or cattle, showing the yield of meat for a known quantity of food, we should be happy to receive them for publication. To produce food for man and food for plants in the most economical way, are the points aimed at.

PROF. JOHNSTON AND AMERICAN AGRICULTURE.

THE readers of this journal saw in the last number, what an Englishman, who has made the science and art of agriculture his professional study for many years, says and thinks of the farming operations of this country. Although Professor J. has fallen into errors that will add nothing to his reputation in the United States, or among men any where who have any knowledge of our government, a few of which we signalized by italics; yet there is too much truth in his account of our bad husbandry and defective tillage to be altogether agreeable to our self-esteem, or creditable to a republic of independent cultivators and owners of the soil. In representing "*all the farmers of Maine as bankrupt*," and the Legislature of New York as printing a large edition of his lectures and of the Transactions of the State Agricultural Society "*for gratuitous distribution throughout the several States*," he gives the people of England and Scotland a very mistaken idea of both, and exposes an inexcusable ignorance of our government and people. The learned professor may yet make profitable additions to his large stock of knowledge.—Were we writing for a publication to circulate in England, we would notice these errors more at length, and thus disabuse the minds of our readers and give them a correct knowledge of our country; but as the errors are so gross as to be apparent to all Americans, it will be more profitable for us to notice that portion of Prof. J.'s remarks in which we are more directly interested. It is better for us to profit by the facts, than complain at the blunders of our visitor.

When the Prof. says that the wheat-growers of Great Britain have little to fear from American competition, he undoubtedly gives expression to an important truth. Europe is full twenty years ahead of us in agricultural science and schools, and the little kingdom of Denmark sent, according to the official returns, 1,320,571 quarters of wheat to England, in 1849—equal to all that went there in flour and grain from the New World. The cost of sending wheat from Denmark to London is but eleven cents a bushel. For many years the Emperor of Russia has had 4000 acres under cultivation as model and experimental farms, and 40 college buildings filled with some 3000 students of agriculture. We learn from the Russian minister at Washington, and other sources of information, that the noblemen of the empire are taking a deep interest in the advancement of this most important national interest. In this country, our nobility and sovereigns have successfully resisted for 30 years, all attempts to foster the study of rural economy as a branch of knowledge as worthy of schools and colleges as the study of *dead* languages, to learn the *dead* mythology of *dead* heathens, who have slept quietly in their graves for 20 centuries. Their idols are worshipped with ten-fold more zeal and devotion now than they were in the days of Socrates, or of our Saviour. With all their literature, the Greeks and Romans did not advance the art of husbandry one hair's breadth in a thousand years; nor can we do any better so long as we neglect to investigate and obey the natural laws which God has enacted to govern the fruitfulness of the earth. Prof. JOHNSTON saw every where in this country unmistakable evidence that its farmers had little reverence for the divine principles of agriculture. So long as we persist in rebellion against the obvious laws of Providence, and heedlessly waste the elements of bread, and meat, and clothing, which we annually dig from the soil, wise men will continue to reprove our folly, and coming generations will certainly reproach us for our stupidity. We can not create the first atom demanded by nature to form a healthy potato, and we know that in twenty-five years there will be fifty millions of human mouths to be fed three times a day, in the United States, and by the close of this century, one hundred millions to be supplied with food and clothing. How few realize truths like these! The ferry across the Atlantic is soon to be so cheap that a million Europeans, from the now rapid increase of the 260 millions on the continent and British islands, is the smallest number we are annually to receive to populate this land of promise. Never was there a time when science, enlarged statesmanship, and a wise system of agriculture were so pressingly needed in America. Had the policy recommended by President WASHINGTON to Congress been adopted, to foster agriculture as the most important branch of national industry, the country would this day be a thousand millions richer in property, and vastly better off in popular intelligence. To WASHINGTON as a General, there is going up in the federal metropolis

a monument which will cost over a million, and be five hundred feet or more in height; but to Washington the farmer, nothing is done except to permit the once fine estate of Mount Vernon to grow up in briars, bushes, and pines, a harbor for wild beasts. All foreigners reproach us for our national disrespect of the home and the grave of the "Father of his country." What with the ten millions a year expended on the army, the ten millions expended on the navy, and the nearly twenty millions given to politicians, it seems extraordinary that a nation of farmers can not afford the few dollars necessary to make the estate of the great and good Washington an experimental or a model farm.

Including appropriations of public lands for the children, grand-children, and great grand-children of those that served with Gen. Wayne in the Indian wars, and in all the wars since his time, with slight exceptions; grants for railroads; and money voted for the ordinary expenses of the Government; the first session of the present Congress expended $100,000,000. For twenty years the writer has tried to create a public sentiment in favor of appropriating the whole national domain to the sacred cause of popular education. The proceeds should be expended by each State as the New York Legislature was persuaded to apply its share of the U. S. surplus revenue. Although the landed security was defective in some counties, nevertheless the four millions received from the national treasury will do incalculable good after every man who nobly aided in making the sum a part of our common school fund, is no longer among the living. We have urged the appropriation of the public lands, in the manner indicated, on legislators at the capitol of South Carolina, at the capitol of Georgia, at the capitol of Illinois, at the capitol of New York, and at the capitol of the Republic; but it has been like "calling spirits from the vasty deep." Popular education is a most unpopular measure, so far as the wild lands of the United States are involved in the question. The higher education of farmers, so that there might be half as many of this class as of lawyers in Congress and the civil employments of government, has long appeared to us an object of importance.

The first executive message in our history, that contains the word "manure," is the recent one from President Fillmore, which seems something like an acknowledgment that there is such a substance, and that it is worthy of a little consideration. Although the importations of manure (guano) in 1849 reached only 11,750 tons, the trade promises to be twice as large in the current year. About $60,000 worth of this article is sold per annum in the District of Columbia, while there is annually wasted in the same District $100,000 worth of nightsoil. We wanted the trifle of $200 to experiment on several European methods of deodorizing and drying this substance, in order to publish the results in the agricultural part of the Patent Office report; but not a dollar could be had. President-making, not the best plan for preparing and using the food of plants, is the leading idea in Washington. In twenty years from this time a different feeling will exist in Congress and most State Legislatures, in reference to the science of rural economy. The careful study of soils, of cultivated plants, of domestic animals, and rural affairs in general, will some day be as highly esteemed in this country, as the study of Greek and Latin now is. After a pretty thorough investigation of this subject, with advantages for reaching a correct conclusion enjoyed by few, we do not expect that the number employed in impoverishing American soils will diminish in twenty-five years. The improvers of arated land will a little more than double in that length of time; but the number of poor farmers will remain nearly stationary. We ought to have a National Agricultural Society, to bring together and excite a cordial union in the feelings of all agriculturists throughout the empire. The friends of rural improvement measurably throw away their labors by isolated and independent efforts. A more extended organization, operating over the whole Union, can render the cause an invaluable service. This would bring thousands of good men true into line, and many sections which most need waking up, might be reached by the reports and proceedings of this national association. It should be independent of government, except Congress might aid in printing, as the Legislature of New York does for its State Society. Without an efficient system, steadily pursued by those that appreciate its benefits, public opinion can never be brought up to that high standard of skillful farming which such gentlemen as Prof. Johnston expect to witness from our great and peculiar advantages. Instead of being far behind English and Scotch farmers—growing fifteen bushels of wheat where they would harvest thirty—we should excel all civilized nations in the excellence of our improved lands, of our crops, and our domestic animals. To achieve this distinction, we have only to will it. What is our much boasted self-government worth, if we can not use it for *useful* as well as *ornamental* purposes? Washington, the President of the Convention that framed the Constitution, labored to place agriculture on its true basis in reference to government patronage; but, alas, his countrymen have repudiated his wisdom in this matter. There are hundreds who ought to know better, that deny the right of Congress to foster improvements in agriculture in any way whatever. There are still more who admit the right to act, but deny the expediency of our attempting to keep pace with Denmark, Russia, and Prussia, in the art and science of grain-culture. If one having a taste for rural science, should undertake to demonstrate by analysis and by practice, that one kind of mold is really worth ten times more than another for growing wheat, (as is the fact,) it would take him a long *lifetime* to communicate the information to one-half of the wheat-growers in the United States. How could he possibly reach them? They neither see nor care to see any agricultural journal; they know nothing of agricultural societies, their transactions, nor of Patent Office reports. There are over a million of American farmers in this condition. How are they to be reached? Only by cheap papers universally distributed. We have been endeavoring to do our part in this respect. We furnish a paper so cheap that the price can deter none from reading it; and yet we think the richest and the ablest may peruse it with profit. We also endeavor to make it attractive and interesting to the young; and we rejoice at the evidence we are constantly receiving that we are not laboring in vain. There are those who are steadily laboring to improve themselves and their neighbors, by spreading agricultural information, thus elevating our system of agriculture; and though they may be unknown to fame, they are no less the benefactors of their country.

BEES.—No. 6.

GILMORE'S PLAN.—This method consists in placing the bees in one common tenement, and feeding them with a compound, or syrup, said to cost only about three cents a pound, which it is contended the bees elaborate or change into pure honey, even superior to that gathered from nature's store-house! It is also said by the pretended discoverer of this system, that three or four swarms joined by him in common, produced over *twelve hundred* pounds of the purest surplus honey in one season, worth two shillings per pound!

Now, it is no new thing to show that bees will store up large quantities of any thing of the nature of honey, when fed to them; but it is a new thing in the history of this insect, to show that what is received into the honey vesicles undergoes a change therein, and when deposited in the cells is a different compound or substance from that originally taken by or fed to them. The gatherings of the honey bee undergo no change whatever while passing from the flowers of the field to the cells of the comb. If the honey has any impurities or unpleasant flavor in the flowers, it has the same qualities after being stored by the bees — not a whit the better or worse for the manner of transit. This is shown by the fact that the honey from buckwheat blossoms is ever dark colored and of unpleasant flavor, while that from white clover is transparent and of excellent flavor.

Again; you may feed bees whatever you please, the article fed to them is precisely the same when stored in their cells as it was before being taken by them. Let any one try the experiment of feeding *syrup of sugar*, which is the only substance that they will eat except honey, and let him examine the cells when filled, and if he finds anything there save the identical syrup of sugar, with all its original flavor, I will admit that I know nothing about the matter.

There are but *two* substances that can possibly be fed to bees to any great extent, viz: *sugar* made into syrup, and *honey*. Mr. GILMORE must use the one or the other of these articles to form his compound. Sugar is not suitable, since it would not be saleable in the combs. Honey, then, must be the substance used. The honey that is imported from Cuba in casks, is worth from fifty-five to sixty cents per gallon, or from four to five cents per pound. This honey-bees will store up greedily; and it is what Mr. G. uses, without doubt. Some article is probably mixed with it to partially destroy its identity, and which perhaps reduces the cost to the sum named by Mr. G.

The deception in this business mainly lies in asserting that the article fed to the bees is changed to the purest and best honey. This I contend is false, and with this the whole theory tumbles down; for, who would desire to sell or to purchase so spurious an article as West India honey in the form of northern honey-comb? I also deny that as much honey as 1200 pounds was ever stored up by three or four families of bees in *one* season, as *surplus* honey, even when fed with as much honey as they could carry away.

To be as brief as possible, this system is one of the greatest humbugs, in apiarian science, of the age. Last spring a gentlemen wrote me from Boston, enclosing an advertisement of one of GILMORE'S agents at Cambridge, relative to this system, and requested my opinion thereon. I replied, that in the advertisement of seven lines there were *six* falsehoods, and I named them. I also authorized him to say to said agent, who was a friend of his, that if he would prove before any three disinterested gentlemen in Boston, that the compound was any other substance in the main than West India honey, I would forfeit *one hundred dollars*. He declined the proposition. Some few weeks since, I had occasion to write to the gentleman who solicited my opinion as above, and I asked him how his friend had succeeded in the sale of GILMORE'S system, and what the result of it was with purchasers. "It has proved a humbug," said he, "about here. It appears to be so unreasonable to suppose that any substance can be found to feed to bees, that will produce as good or better honey than the flowers of the field — that it is absurd upon the face of it."

In Mr. GILMORE'S pamphlet of the description of his plan, he gives the names of *thirty-three* individuals who come forward and attest by certificate that they have examined his system, tested the honey made from the syrup, are knowing to the fact of the large storage of honey, (1200 pounds by three swarms,) and are fully satisfied of the truth of the whole statement as given by Mr. G. On another page he gives the names of *thirty-two* persons who he says has purchased Rights, and among which there is not a single one of the men *(men of straw)* who signed the said certificate! Now, if these gentlemen actually knew all that they have certified to, if any such men exist, they would have pledged the coats upon their backs to secure a Right, if they could not have done it in any other way.

If my remarks upon this system are incorrect, I shall be happy to make any retraction that the case requires, on having it shown to me by gentlemen who have purchased Rights of Mr. G., that I am wrong; till then I shall affirm that all who purchase Rights, "pay very dear for their whistle." I make these remarks solely on the ground of the public good, in a general course of remarks touching the culture of the bee, and I feel bound to speak out freely, though my sentiments may conflict with individual interests.

T. B. MINER,
Author of the American Bee-Keeper's Manual.

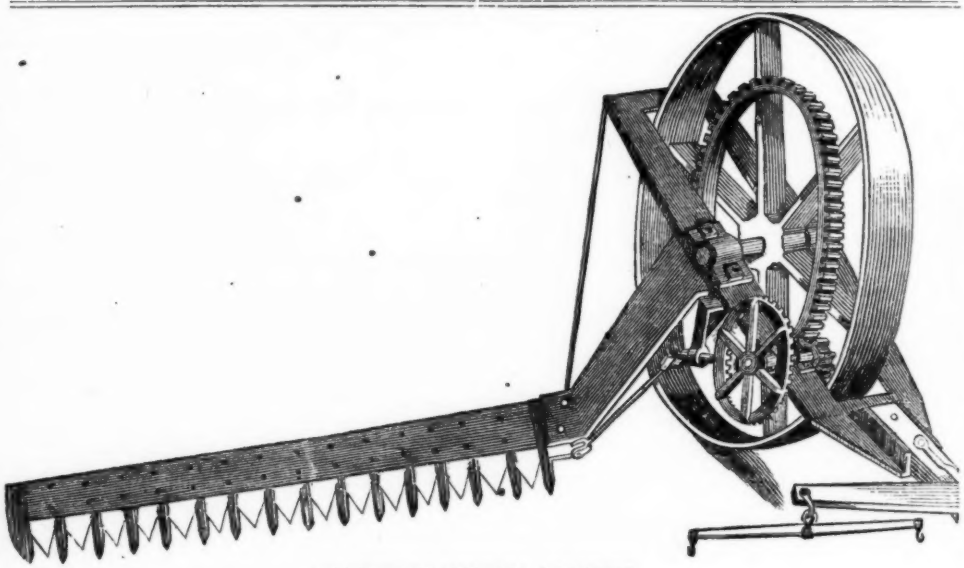
Clinton, Oneida Co., N. Y., Jan'y, 1851.

CURING HAMS

ONE says, put in a little molasses; another says, put in some sugar; and another says, if you want your pork to keep good, sprinkle a little pepper between each laying.

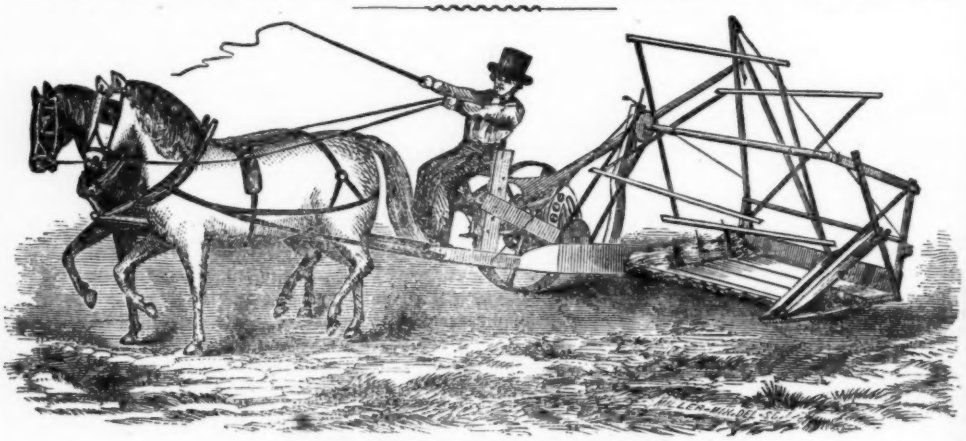
Now all this is unnecessary. Let any man take good salt, sprinkle the bottom of the barrel well with it, and rub the sides of the barrel, that the hams may not lie against the fresh wood; then put down your hams, salting them well; make brine enough to cover, mixing in three ounces of saltpetre to a barrel; let them lie in the pickle four weeks, and then take them out and soak them three days; then hang them up and smoke them, but not to death; then pack them with sweet hay, in barrels. In this way they will keep all summer, and be sweeter and nicer in August than any of your sugar or molasses cured hams will that I have ever tasted. Try it for yourselves. J. B. C.—*Groton, N. Y., Jan.*, 1851.

Two or three spoonfuls of tar or lard put into the mouths of cattle, hoven from eating clover, will relieve.



KETCHUM'S MOWING MACHINE.

THE above engraving is a representation of Ketchum's Mowing Machine. It is not yet generally known; but we believe where used, has given good satisfaction. We saw it at the last State Fair, and have seen it in operation, and have heard but one opinion in regard to it. Last season we received several letters, inquiring where a good mowing machine could be obtained. We took some pains to ascertain, and published a short notice in the Farmer. On seeing this notice, our friend GEO. SHEFFER, of Wheatland, immediately procured one. He made some slight improvements by strengthening some weak points, which we believe has been adopted by the manufacturer; and Mr. S. informed us last summer, that he did all his own mowing, and nothing could tempt him to part with it. We refer all desirous of further information, to Mr. S., who no doubt will be pleased to give all necessary information.



DENSMORE'S SELF-RAKING REAPER.

THE above cut represents a reaping machine invented by Mr. BYRON DENSMORE, of Brockport, in this county, and put into operation the last harvest. We had an opportunity of examining this machine a few days since. It is a difficult matter to judge of the real merits of such implements without seeing them in operation; but we see no reason why it may not work well—at all events it is worthy of examination. Those who used it in the last harvest, and those who saw it in operation, speak of it in the highest terms, as both cutting and raking the grain in the most perfect manner. The rake that discharges the grain from the machine, vibrates crosswise of the platform, which is double, and the teeth extend up through grooves in the upper platform. These teeth turn down and run back under the grain, and then raise up and sweep it off, with a quick motion, at the right side of the machine. If Mr. D. has succeeded in making the reaping machine a perfect self-raker, which is yet to be fully decided, he has certainly made a most important improvement. See advertisement in this paper.

Inquiries and Answers.

THE WIRE-WORM.

MESSRS. EDITORS:—I saw in your paper a request to know of some plan for destroying or obstructing the wire-worm, and I, too, would be glad to know how to destroy them; for they have done me, and others in this vicinity, a deal of damage. I have been watching them, and have been trying some experiments which may perhaps be of some little value.

A few years ago I was preparing two fields for wheat, and when I began to cross-plow, I found my fallow full of wire-worms. I cast myself about to see what I had better do, for I thought that if I put in seed they would destroy it. Some of my neighbors said if I would let it lay as long as I could before sowing, the worms would disappear in a measure. I did so, and found they had diminished by the time I finished my plowing. My other fallow, which I supposed to be full, I was at a loss what to do with. I got a gang plow, and put it in without crossing, thinking that by leaving the sod under for the worms, they would leave the grain; *but they nearly spoiled both fields.*

I had a piece of oats on new ground, which I purposed to put to wheat after the oats; but the worms had injured the oats very much, and I told my folks that I should have to give up that piece anyway, but that I would put the plow in and see how it looked. This was in the fore part of August. Soon after, I began to look for worms, and I found them pretty thick, mostly at the bottom of the sod that had been turned under; and there were not only worms, but skins of worms, which excited my curiosity. On inspecting closely, I found the skin slipping off of some; and when the skin was off, they contracted in length, and there were legs and wings, and in a short time they were perfect bugs of a dark bronzed color, which grew darker and at length became black. "Well," said I, "there are eternal lots of these fellows." These little black bugs, of about half an inch in length, are very common, but I did not know before that they were produced by or from the worms; but so it is.

The next year I was going to put in a piece to wheat, which I knew was infested with them, and when dragging the ground, I would stop and sit down on the drag to rest and look for bugs, which were to be seen quite plenty, looking for a hiding place after being disturbed by harrowing. I had noticed through the summer, while paying close attention to them, anxious to find some way to destroy them, that they congregated together, and would get under whatever they could, like sods, flat stones, stocks of hay, barley, wheat, &c. A thought struck me—I would try to burn them by driving them under bunches of straw and setting fire to it. So, after dragging my fallow, I took a chain and drew across the field, making lines seven paces apart, and set the boys drawing straw and pitching a fork full every few feet on those lines. I then took two stone-boats lashed together, put a boy on them, and drew them along on the mellow ground, between the rows of straw, for the purpose of disturbing the bugs and smoothing the ground so that there would be but little chance for them to hide. I could watch behind the team, and see them, all dirt and dust, running to and fro, until finding the straw, they would remain there. After about a week it looked likely to rain, so we set fire to the straw. After burning, I looked in the ashes, and found in a spot not larger than my hand, some forty or fifty, making quite a handful. I then went to the next pile, about three paces off, and there were as many more of the dead rascals.—"Good," said I, "we have used up a good lot of them; but probably there are too many left yet." And so we found it; for they ate considerable of the wheat; but still, not enough to injure it so much but I got a first rate crop on the same piece where they completely destroyed the two last crops.

This fall we have turned in a very heavy crop of rowen clover, and sowed the same piece, and they have not injured it; but I think it is on account of the clover, which furnishes them with food in part. I have another field adjoining, which has lain to pasture three years, which we plowed five times on account of the thistles; and some say that will destroy the worms; but they have eaten that piece badly. I would like to plant this piece to corn for the next crop; and how am I to prevent the worms from destroying the corn? I will tell you how I think of doing: it is, to stock to clover, and to plaster the clover the spring before planting, and get as much on the ground as possible, and not plant till rather late. Perhaps the worms will feed on the clover, and leave the corn.

Some have had good luck in turning in green sward for corn; but the next crop catches it. If I summer-fallow after the corn, I will try the straw again. But if I put in barley after corn, then what? If straw should be put on and burned early in the spring, before putting in the barley, it might have a good effect, for the bugs are early at work in spring, and appear to live on vegetation on the ground, while their larvæ feed upon the roots.

One of my neighbors has suffered very much by them, and wonders why he can not find them when he is plowing, and will take a spade and dig to see where they are, but they are gone. In a few weeks, or after the barley is nicely up and growing, the worms commence devouring it root and branch. Then you may dig lots of them with your fingers, and many of them not larger than a cotton thread. As near as I can ascertain, by pulling the bugs in pieces, they lay their nits fall and spring. I have seen several articles on the subject of wire-worms, but none that satisfies me. S. R.—*Mendon, N. Y.*

PIGEON WEED.

MESSRS. EDITORS:—In answer to the inquiry of R. W. B., on Pigeon grass, I would give my experience. Some years since, I had a field of four acres, which had become so well seeded with pigeon grass that I got only about half a crop of oats. The next year I plowed it soon after planting my corn; in about two weeks I harvested it; plowed again about the first of July, and harrowed as before. The last week in August I plowed again, and soon after sowed it to wheat, one bushel to the acre. I had one hundred and twenty-six bushels of good wheat. I have not been troubled with pigeon grass on that field since. I had another small field in like circumstances, which I sowed to oats and seeded it, and mowed it four years, and then plowed it, and the pigeon grass was as thick as before, which led me to believe that it is one of those kinds of seeds that will not grow unless near the surface, and exposed to heat and light. E. F.—*Wayne Co., N. Y., Dec.*, 1850.

WILD MUSTARD.

In the December number of the Farmer, page 278, a correspondent inquires in regard to Wild Mustard. I can answer in a word, that it is one of the worst enemies to summer grains within my knowledge. I have lost the use of valuable land, (except for grass or hoed crops,) that had unfortunately become seeded with it. On mowing grounds, and grass lands generally, it does no great harm. But in summer wheat, in oats and barley, it is, if neglected, an absolute pest. To destroy it, a gang of hands must go through a grain field and pull up every stalk on which a yellow blossom appears. By taking each a given width so as to overlook or neglect no space, and going over the whole field, it may be almost entirely eradicated. And this should be done every season, if a single yellow blossom appears. The seed is so fine, and of course so numerous from a single stalk, that to neglect a cultivated field on which it was visible, for one or two seasons, would lead to ruinous results. Care should be taken, in passing through the grain, not to trample it down unnecessarily, and but little injury will result from this source. Whenever it appears in winter wheat, as it occasionally does, the same measures should be taken to destroy it. I am confident, many farmers do not justly appreciate its true character, from the manner in which it is taking quiet possession of their fields. D.

SNAPDRAGON.

Though this plant is cultivated for the beauty of its flowers and foliage, it becomes very troublesome when it is permitted to extend itself into pastures and meadows. Botanists now describe it under the name of *Linaria vulgaris*, or common False Flax. A few years ago I saw instances of its having covered the fields and nearly eradicated all kinds of grass, on the west side of the Hudson, north of the Highlands. I have also seen it spread from its location in the garden into the adjoining fields with much rapidity.

Your correspondent inquires *how it may be eradicated*. As I have never seen any difficulty in restraining its extension in the garden, I have ever believed it is easily subdued. I have near by me a bed of it in a garden, which has so far been confined to its designed situation, with no uncommon effort. Though it is an annual plant, it produces a multitude of seeds. These doubtless lie buried often in the earth for years, like many other seeds, to germinate when they are favorably exposed for this purpose. While the hoe would easily destroy all the present crop, the operation must be repeated from year to year, till the work is accomplished. C. D.

Messrs. Editors :—I am glad one of your "Faithful Readers" feels anxious to get rid of his snapdragon. It is one of the worst weeds that grow. Its smell is so offensive that cattle will not eat the grass that grows with it, and *one* of the most difficult to destroy ; and yet I have frequently seen it cultivated for the sake of its beautiful flowers. I was once riding by such a flower garden; and stopped and told the gentleman that I thought he was cultivating a very troublesome weed for flowers. He just asked me how much I charged for the information ? I told him he was welcome to it, and rode on.

I have known a great many experiments tried to kill it, but all failed where there was much of it. Where it is in small spots, *salt*, applied plentifuly so as to prevent it from growing for two years, will destroy it. My father had a lot of it plowed (I think) nine times in one season, and it had the desired effect for that season, but the next it came up as neat and pretty as ever, and he gave it up as an unconquerable foe. It did not grow much the next season until quite late, and probably came from the seed. If he had continued the plowing another season, it might have destroyed it. If I had much of it on my farm, I would commence an exterminating war against it with the plow, and would prosecute it to the death. Stephen Hull.—*Clyde, N. Y., Dec.*, 1850.

Eds. Farmer :—I have noticed in your invaluable journal (of which, by the way, I am a life subscriber,) an article soliciting a knowledge of the means to exterminate Snapdragon. Before it spreads to much extent, I have succeeded in destroying it with fish brine, but when it embodies a large portion of the fields, the process of frequent plowing would perhaps be more easy and equally as effectual. A. M. —*Claverack, N. Y., Dec.*, 1850.

SEED POTATOES.

In the December number of the Genesee Farmer, page 277, the question is asked, "Whether it is more advantageous to plant small potatoes than large ones ?"

From my earliest youth I have been taught the importance of selecting the largest and best potatoes to be used for seed. My practice has been occasionally to put one such in a hill ; but, generally, to cut them into two or three pieces and to put three pieces into each hill. In the spring of 1849, owing to the scarcity and high price of potatoes, I was induced to plant, as an experiment, some small *Mercers* in the garden, on a square that was highly manured. The yield was great, and the potatoes first rate as to size. Being much disappointed, and stating the fact to a friend, he gave an unqualified opinion, that the favorable result was owing to the richness of the soil. The past season I planted several bushels of the largest and best *Mercers* I could purchase in the city. They were generally cut into three pieces each. But the supply not being sufficient, I planted three bushels of small ones, such as had been laid aside as too small for table use. Of these, three were put into each hill, and were planted along side the large ones. The quality of the ground, the time of planting, and the tillage, were in all respects the same. When the shoots from the small seed first appeared, and for a short time after, I thought them rather more slender than those from the large ones, but soon there was no perceptible difference. At harvesting, the size, quality and product from the small seed was equal in all respects to the large ones. But the ground on which these were planted was rich, having been highly manured. To complete the experiment, however, I planted at the same time half an acre of ground of fair quality that had been tilled before, but not manured. Half the piece was planted with the small seed, and half with the largest and best quality. These were cut into two or three pieces each. Previous to the first hoeing, a handful of leached ashes was thrown on each hill. At harvesting, the potatoes were large and fine ; and those from the small seed were equal in size and product

to the others. The richness of the ground, therefore, in the first parcel, was not the cause of producing as large potatoes from the small seed as from the large. In the latter case, ground comparatively poor, produced the same results. If a bushel of small potatoes, that would not sell for one-fourth the price of large ones, should prove as good for planting as the large, it would be well to know the fact. I have made these suggestions to direct the attention of farmers to the subject. E.

DAIRY STOCK.

MESSRS. EDITORS:—Being very desirous of importing the best dairy stock, I have taken the liberty to make a few inquiries through your truly valuable Farmer. I have carried on a dairy in Ayrshire, Scotland, for twenty-five years, and always considered the Ayreshire cow the best that could be obtained—milking qualities considered. The Short Horns were considered the best for fattening. Our best Ayreshire cows yielded thirty-six quarts per day, on pasture alone, and our poorest, twenty-four quarts per day during June and July. Now I have been a reader of the Farmer for the last two years, and I have noticed much has been said in favor of Short Horns as milkers, and nothing, comparatively, of the Ayreshires. Is it true that the Short Horns are better milkers, in the United States, than the Ayreshires? In a recent visit to Toronto, Upper Canada, I found that the Ayreshires were quite favorites with many of the first farmers, for milkers; and by some, the Short Horns were preferred, in reference to both milking and fattening qualities. But for the dairy alone, which do you consider the best of our imported breeds, and where can they be obtained? J. BRODIE.—*Belleville, N. Y.. Dec.*, 1850.

WIRE FENCE.

MESSRS. EDITORS:—I would like to learn, through the columns of the Genesee Farmer, the best and cheapest manner of making Wire fence. Many of your readers and subscribers are no doubt well acquainted with the cost and manner of construction, &c. J. J. MARLETT.—*Hoffman's Ferry*, 1850.

GREAT YIELD OF SQUASHES.

THE past summer I raised twenty-five crook-neck bell squashes from one seed. By the help of my neighbors, we put them, attached to the vine, into a wagon, carried them to the County Fair, and drew a premium. They weighed 400 pounds separate from the vine. I measured the vine, with all its branches, and it measured 32 rods and 4 feet. Another sort that were green outside, and pumpkin-shaped, produced six large squashes, and the vines measured 40 rods. No extra care was taken with them. They grew among small trees in my nursery, where they had plenty of room. AMERY WILLSON.—*Marcellus, Dec.*, 1850.

We received a letter from Mr. W., which was evidently intended for some other person. It was returned, and in correcting the blunder, which was made by "putting the wrong inscription on two letters sent at the same time," Mr. W. tells the following story, which is too good to be lost:—"It reminded me of a divine who was called upon for advice by a neighboring society. He wrote a letter of advice to them, and at the same time was called upon by a man on his farm, to know what he should do with some unruly cattle of his. He wrote to the servant, folded the letter, and did as I did, put the wrong inscription on each one, and when the church members opened the letter, it read thus:—'Chain up the big black bull, and that will restore peace and tranquility.' And they chained the bull, and that ended the difficulty in the church."

COMMON SALT AS A FERTILIZER.

As I noticed a remark, in a late number of the Farmer, on this subject, I wish to offer the following remarks:

For the superior growth of vegetables, various substances are necessary. It is not enough that most of vegetables have carbon, oxygen, hydrogen and nitrogen—the four grand constituents in their composition. I know that these are often called *essential*, and that some others are spoken of as accidental, or at least, not necessary to the perfection of vegetable matter. It seems to me that this is a loose mode of expression, and that the implied notion needs qualification.

Thus chemistry shows that sulphur and phosphorus are essential to the existence of the *fibrine* and *albumen* of animals, the former being the substance of *muscle*, and the latter of *nerve*. LIEBIG, and others, have proved that vegetable fibrine and albumen have the same composition as the animal; and hence it is the necessary inference, that animals obtain these substances, ready formed, from their food, either animal or vegetable. The vegetable world sustains a direct importance to the animal, in the production of these great vegetable substances, which become by the process of digestion and nutrition and assimilation, the most necessary of animal compounds. The same remark is true of *casein*, which is an important portion of milk, and abounds in cheese.

In the grasses and grains, the essential food of man and numerous animals, there exist silex, phosphates of iron and lime, &c., potash, soda, lime, magnesia, sometimes a little common salt, and some others. These substances are necessary for the plants themselves, or, they are constituents of the plants and of their fruits.

Now, these are obtained chiefly from the soil, and if the soil does not possess them, they are to be added in the supply of manures. *Wheat*, it is well known, must obtain from the earth a certain amount of phosphate of lime for its highest state of excellence.

It is to be expected that these substances will exist in most soils. Hence the rocks, by whose disintegration soils have been formed, are found to contain them, in their natural state. If they have been removed by any means from the soil, the farmer must supply the adequate quantity of them. This is a necessary, though small part of scientific agriculture. Besides the common substances and fertilizers in soils, some rare ones have seemed to be valuable, as sulphate of iron or copperas, common salt or chloride of sodium, sulphate of lime or gypsum, &c.

Common salt is found in plants of the ocean, or seaweeds, while potash exists in land plants. The latter we know to be a great fertilizer, and important in plants of the land, but not in those of the ocean. Hence we might expect to find common salt of little consequence to land vegetables, but of great to seaplants. Hence, too, it would be probable that a certain proportion of common salt would be found in soils, if it was essential to the constitution of land vegetables, as is silex, potash, phosphate of iron, and the earthy phosphates and carbonates.

Many years since ELKANA WATSON, Esq., stated to the Berkshire Agricultural Society, at its great anniversary Show and Fair, the favorable results attained by some agriculturists in Pennsylvania, from the use of common salt as a fertilizer. Other experiments have since been tried with some success. The

analyses of vegetables, by Prof. EMMONS, in Vol. II. of his State Agricultural Report, show the existence of the elements of common salt in some soils and in some parts of the vegetables. The quantity, however is small, sometimes none, sometimes a mere trace of the chlorine.

On the whole, the probable conclusion is that common salt is useful as a fertilizer—that only a small quantity is taken up by vegetables, and only a small proportion of it is necessary or profitable.—C. D.

FARM BARN AND STABLE.

As we have, during the last month, received several inquiries for a plan for a barn and stable combined, one of our correspondents particularly mentioning that he wished for a plan suitable for sloping ground, we copy the following designs and description from *Downing's Country Houses*. The plan is perhaps on too extensive a scale to suit most farmers, but can of course be varied. No one can carefully study the plans without getting some valuable hints, whether he ever builds after it or not.

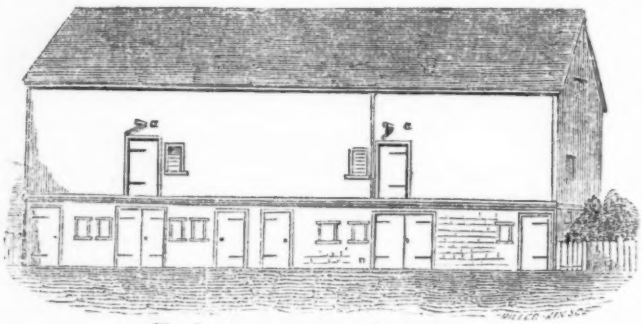


Fig. 1. ELEVATION OF A BASEMENT BARN.

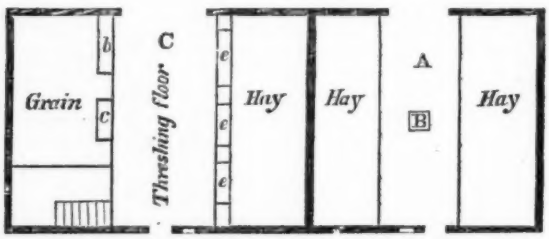


Fig. 2. PLAN OF THE MAIN FLOOR

"As one of the best and most complete examples of this kind of barn and stable within our observation, we may instance that of our neighbor, Mr. WILLIAM SAYER, 8 miles from Newburgh Mr. SAYER's farm lies in a grazing district, and, of course, his outbuildings are different from those required in a strictly grain-growing district. We have never seen, however, in any part of the country, a single farm building in which economy of space, excellence of arrangement, and nicety of construction were more completely combined than in this barn. We may add, that the plan is entirely Mr. S.'s and for a farm of this kind, is not easily improved.

The elevation, Fig. 1, shows the stable or basement side, with both stories. The posts are 16 feet long, from the basement walls to the eaves. The opposite side, one story high, shows two pairs double doors for driving in loads of hay and grain. The whole building is 30 by 72 feet, outside — 30 feet square being a hay barn, under which is the stable for cows, and the remaining 43 feet being a grain and hay barn, with horse stalls, carriage-house, etc., below.—At *a a* are shown tackle beams, with hooks, to which a block can be attached, for lowering or drawing anything up to the main floor.

Fig. 3. THRESHING FLOOR.

In Fig. 2, which is the plan of the barn floor, A is the main floor, 12 feet wide, with a hay-mow on each side. At B is a hay-well, or hole in the floor, with a curb round it, through which the hay is thrown into the feeding passage in the cow stable below. This curb is removed, and a trap door put in its place in summer.

C is the threshing floor, 14 feet wide, with a hay-mow on one side, and grain on the other. On one side of this floor is a space, *c*, through which straw is thrown into the straw room, and another, *b*, through which roots are thrown into the root cellar, both being in the basement; while on the other side are openings, *e*, *e*, through which hay is placed in the racks of the horses, in the stable beneath.

Fig. 3, which is a view of the mow on one side of the threshing floor, will show how cleverly these openings are managed, in order to occupy no space wanted for other uses. In this, *a* is the side of the mow, boarded up about 3½ feet, in which are doors, *b*, that shut out all dust, etc. These doors are hinged on the lower side, and when thrown down, or opened, *c*, give ample space for filling the racks below in the easiest manner.

Let us now examine the basement or stable story of this barn, fig. 4. The first feature that demands our attention is the cow-stable, occupying about 30 feet square, being that portion on the left hand of the plan, fig. 4.—Here is a large "feeding passage," 11 feet wide, including the mangers, *a*, *a*, on a level with the floor.* This passage is supplied with hay, it will be remembered, through the hole, B, in the ceiling, (which is in the floor of the barn above.) This well-hole acts also as a ventilator, whenever one is necessary, for the whole cow stable.

The cow stable accommodates 18 cows, and the manner of placing the cows in the stalls is both original and excellent. The stalls measure 3 feet 2 inches from center to center, (a width scarcely enough, in our judgment, but which Mr. S. declares,

*This feeding passage (including the mangers) has a mortar floor made of lime and sand, over small stones, perfectly hard and smooth, so that no hay seed is lost, while the whole can be kept as clean as a parlor—as indeed it is, under Mr. Sayer's excellent management.

from long experience, to be amply sufficient in this mode.) These stalls are formed of a series of light *gates*, or rather each side of the stall is a single gate, swinging—not upon hinges likely to be broken—but upon a wooden pivot, made on the upper and lower end of the frame post at one end, 2, of the gate. Supposing the cows entering the door *b*, fig. 4, to be stalled for the night—the gates being all swung open (as the three first are represented,) the first cow enters—the gate shuts behind her, and thus forms her stall—then another, and the gate is shut, and another, until all the gates are closed, and the cows stalled for the night, as represented on the other side, *c*. These gates are made of oak, framed so as to be light and strong; and as the pivot post, at the end on which the gate swings, rests in a hole or socket at the bottom, by raising it a couple of inches the gate can be unshipped and taken out in a moment. In this way a double stall can readily be made for a cow about to calve.

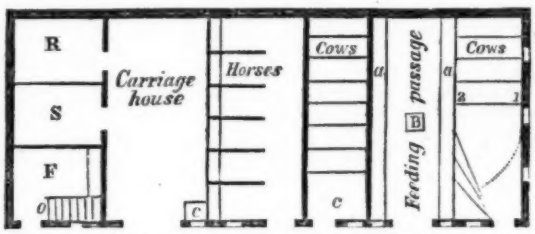


Fig. 4. PLAN OF THE BASEMENT FLOOR.

Next, on the right, see fig. 4, is the stable, 14 feet wide, with stalls (5 feet wide) for six horses. To the left of this is the carriage house also, 14 feet wide. At the side of the door, on entering this apartment, is the pump, *c*, a large cistern, which takes all the water from this side of the roof, being built under the floor here. There is a spout running through the wall and another through the stable, to convey water both into the cattle yard and the stables.

The space of 14 feet wide, to the right of the carriage-house, is occupied by a small root cellar, R; a place for straw used for litter, S; and a spare stall, F, for the occasional use of a pair of horses or oxen. Here, also, is a broad flight of stairs, *o*, which ascends to a store room for grain, etc., on the barn floor above.

WINTERING STOCK.

MESSRS. EDITORS:—I observe that some of my neighbors let their cattle run in pastures late in the fall, in snow and hail storms, endeavoring to get a scanty subsistence from the half frozen ground. Now we think there is neither kindness nor economy in such treatment of our domestic animals. They must, of course, suffer more or less from exposure to the cold rains, and rigorous nights of this season of the year, even without snow. The drizzling storm penetrates the hair, or the fleece, to the skin, chills their limbs and retards the circulation of the "blood, which is the life," whilst the feed, frost bitten and withered, its juicy sweetness gone, is scarcely worth picking.

The opinion of the cattle may be gathered, from their wandering wistfully about the fields, or gathering in the vicinity of the barn, turning up manure heaps for the few straws they can pick out of them, and by their lowing, plaintively prefering their requests for better food and shelter. The farmer who pursues this plan of late pasturing, without any feeding, may save a few stalks and a little hay, but loses more, I imagine, in the condition of his stock. When cattle find so little nourishment in the frost-bitten grass, that they turn eagerly to dry hay, or even straw, have we not a right to conclude that it is high time to commence feeding them?

Nor can a farmer be guilty of more thriftless waste and cruelty, than, after commencing to fodder his stock, to scatter his hay or straw about the barn yard and leave them to stand and shiver in the bleak winds and storms of winter. Cattle appreciate kind care and good shelter, and thrive under them, more than ever entered into the dreams of some men. Their increased flesh, smooth, glossy skin, and saleableness next spring, if desired, would amply compensate for the trouble and expense of warm sheds and stall-feeding. In addition to this, the hay saved that was formerly trodden under foot, and the diminished quantity consumed, it is believed, would pay the cost of all the lumber required to erect comfortable shelter for them, perhaps in a single winter, in the case of large herds. Every body knows, or ought to know, that animals in good condition, and warmly housed, not only thrive, but thrive on two-thirds, perhaps less, the amount of food that is otherwise demanded. I know this is an old story, Messrs. Editors, but a "continual dropping will wear even stones."

I have in view, at this moment, two farmers. One of them has a select herd, which, at this season, he shuts up in convenient stalls every afternoon at about 3 o'clock, fastening each animal to a post with a "cattle-tie" and sliding ring, which is far safer and more comfortable than the stanchell, feeding them in mangers, and letting them out, for water and exercise, in the morning, say at 9 or 10 o'clock. His cattle are always in condition, come out fine in the spring, and command a ready sale; while the saving of hay, he has been heard to say, is nearly one half. The other leaves his animals to shift for themselves in a storm of sleet, or gale of wind, protecting themselves, as many as can, and as well as they may, under the lee of the barn yard fence. He feeds them abundantly, but scatters the hay on the ground. A good part of it is destroyed, and what is consumed is not sufficient to counterbalance the piercing cold. Consequently, when spring opens, his cattle are poor, rough and gaunt, and likely spend half the summer before they get over their hard fare. Nobody, of course, cares to buy such cattle. D.—*Gilbertville, N. Y.*, 1851.

REMEDY FOR VEGATABLE POISONS.—As almost every farmer is more or less troubled with poison ivy, sumach, parsnip and the like, from which I have suffered very much myself, and after trying a great variety of remedies, have found that a poultice made of buckwheat flour and butter milk, with a piece of blue vitriol the size of a pea, pulverized and dissolved, added to the mixture, has had the happy effect of removing the trouble, and effecting a cure in a short time. Some of your numerous patrons may find this receipt worth ten times the cost of a yearly subscription of the Farmer. E. S. FOX.—*Athens, N. Y.*, 1851.

IF you mean to be happy when you are old, be temperate and industrious when you are young.

PARASITIC FUNGI OF THE FARM.—No. 2.

FIGURES 4 and 5, in the January number of this journal, represent the most common variety of mildew, the botanical name of which is *Puccinia Graminis*. The minute fungus that attacks the joints of wheat, is called *diapazea*, and not *diapaza*, as printed in our last. One of the most common kinds of mildew in this country is the black fungus, which gives a dark sooty color to whole wheat fields, towards harvest. It is said by those who have made this class of plants a particular study, that this fungus never attacks sound, healthy plants. It has no popular name; it is called by botanists, *Cladosporium*

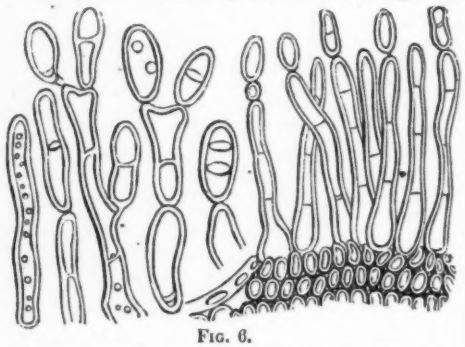


FIG. 6.

Herbarum. Fig. 6 shows it to be quite unlike common mildew; and it grows on old leather as readily as on wheat. Its spores (seeds) may be seen in fig. 6, in their cases. The common appearance of straw

FIG. 7.

affected by this parasite, is shown in fig. 7. Whatever preserves the health of wheat, is a preventive of this malady.

We now come to fungi called *Uredines*, plural of *uredo*, and derived from the Latin *uro*, to burn.—There are several varieties of this fungus; the most common are *uredo rubigo*, (fig. 8,) or red rust, *uredo segetum*, and *uredo fetida*, (fig. 9,) or fetid smut. The two last take the place of seeds in the heads of wheat. Maize or Indian corn is subject to attacks from these parasites, as well as barley and oats.

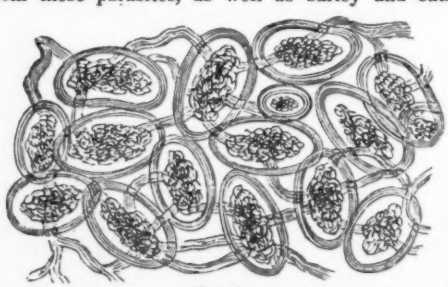


FIG. 8

"Rust," from its resemblance to the red oxide of iron, has often been attributed to an excess of that mineral in the soil. In England it is variously denominated "*red robin*," "*red-rag*," and "*red-gum*." Damp, warm weather favors the growth of this fungus; and its spores multiply with astonishing rapidity. Fig. 8 represents the spores of red rust as they appear under a microscope of great power. The mycelium on which these spores grow, finds its matrix in the tissues of the plant. If the cuticle or outer covering of its stem is well filled with flint, (silica,) it serves to protect the plant, in a good degree, from being "struck with rust." One sometimes meets with wheat and rye straw as hard nearly as glass, and literally cased in a vitrious coat of mail. No uredo can flourish in so sterile a soil. To produce a bright straw to wheat, see that the ground is not too wet, nor full of grass or weeds; till thoroughly, and use lime, salt, or ashes freely, at the time of seeding, or in the spring. Potash, soda, and lime, operate to increase the solubility of fine siliceous sand, of which the ash of wheat straw should contain about 68 per cent. Clean culture, a reasonably dry soil, and a plenty of alkalies in it, are the best preventives of rust.

There are two common varieties of "smut." One is the *uredo segetum*, and the other *uredo fetida*, (fig. 9.) The spores of both are found in the covering of seeds, and seem to be grown at the expense of elements designed by nature to form starch and gluten, if the parasite did not attack the cereal. The seeds of smut (*uredo segetum*,) are found, by the measurement of a micrometer, to be only the two thousandth part of an inch in diameter. Although very undesirable in flour, this uredo is less offensive than the fetid variety, which is more oily, and has

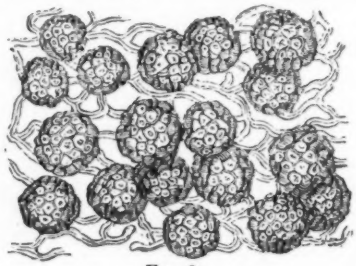


FIG. 9.

the appearance shown in fig. 9, under a good microscope. Its spores are much larger than those last named, being the six hundredth part of an inch. Most grasses are subject to this parasite, which destroys their seeds, as all observers of natural phenomena have seen wheat aborted by this malady.

Moses threatened the disobedient Israelites with mildew, and the Romans had their false god *Rubigo*, whom they thought to propitiate for the preservation of their grain from the disastrous attacks of these parasites. A feast called *Robigalia*, to this deity, was always kept on the 25th of April, to deprecate blasting and mildew. American farmers do not celebrate the feast Robigalia, but they show great reluctance to encourage the critical study of the causes that destroy so many millions of bushels of their grain. If a single dollar has ever been expended in these United States, by Congress, a State Legislature, or any agricultural society, to investigate the nature of mildew, rust, or smut of any kind, the fact has wholly escaped our reading.

For many years the *Berberry* was thought to produce mildew and rust on grain. At length it was

discovered that the leaves of this bush furnished support to a uredo called *æcidium*, as shown in fig. 10.

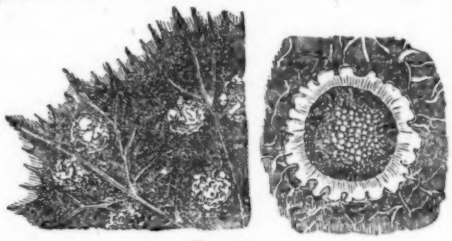


Fig. 10.

On the left is seen a piece of the leaf of the berberry, with the spots of the *æcidium* upon it. On the right is one of these receptacles, containing spores, magnified, to show the form of this fungus. The mycelium on which it grows is also visible. Geraniums and rose bushes are quite subject to this uredo. There is really as little mystery how parasite plants subsist, as there is how aphides, (plant lice,) or lice on a calf's back, live. Destroy the vitality in the seeds of smut on wheat, and they will no more grow than a dead horse can run a race with a living one. We have seen the germs in seed wheat killed by soaking the grain too long in brine, copperas water, and a solution of blue vitriol, to destroy smut. We speak from experience and careful experiments, when we say that no farmer can safely steep his seed wheat in strong brine over four or five hours, without having the grain take up too much salt for the healthy growth of the young plants.—The seed should be dried in slaked lime. It is far better to sow salt on the land, and let it be largely diluted before it comes in contact with the tender germs of wheat.

Fig. 11.

The next fungus we shall describe, is closely allied to uredo, and called *ustilago*. It is mainly confined to grasses, and properly speaking, is a *grass-smut*. In a very young stage, the structure is thread-like, but all traces of the mycelium soon disappear, and nothing remains but a mass of minute spores. (See fig. 11.)

In France, this fungus is so abundant as to injure cattle that feed on hay thus affected. According to Leville, the immense quantity of black dust arising from this smut, produces serious maladies in hay-makers, causing swelling in the head and face, violent pains, and great irritation over the whole system. The poisonous and medicinal effects of the ergot fungus, (*ergotetia abortifaciens*,) is well known.

English grasses are subject to another ustilago, called *typhoides*, which attacks their stems, and renders the hay nearly worthless.

Agaries are a class of fungi of which mushrooms are types. *Fairy-rings* throw out their spawn in a circular direction, and the ground is continually exhausted by the spreading of the plants from a common center.

In some countries, grasses and grain, particularly winter barley and rye, are destroyed by a curious mold which is developed beneath the snow; and if it makes its appearance in snow without a previous frost, it is often fatal to the whole crop. Although this mold has not yet appeared in Great Britain, we are inclined to believe that there is a variety of mold in this country, which will grow on wheat and grass under snow, with great luxuriance.

The parasitic fungi that attack leguminous plants, (peas, beans, and the like,) are either mildew (*erysiphe*) or *diapazea*. The word *erysiphe* is the Greek for mildew. This blight on peas infests the fruit of grapes, peach leaves, and in its early stage is a jointed mold, seemingly quite superficial. On close examination, it shows little globules that change from yellow to black, and spring from a flocose web filled with minute sacs containing the *sporules*. (See fig. 12.) These globules, and the sacs containing

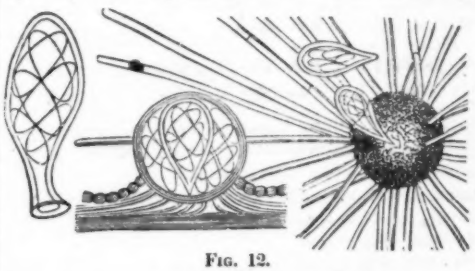


Fig. 12.

spores, or sporules, are here depicted; and a good idea may be had of this fungus by inspecting the drawing. They put out fibres, which lift them up from the surface of the leaf, and are preceded by threads, white or grayish, consisting of bead-like joints, of which it seems that the uppermost fall off and grow. Beans are also injured by a uredo.—From the use of flowers of sulphur, mildew has been destroyed on peach leaves and grapes; but on field crops of peas, no remedy has been found, except clean culture, and seeding with oats to keep the vines from falling upon the ground.

Giving Medicine to Ruminants.—All medicines given to ruminants, or cud-chewing animals, of a nauseous nature, should be given in a fluid form, and poured slowly and gently down the throat, holding the animal's head no higher than is necessary to prevent the liquid from running out of the mouth, and leaving the tongue free, that the animal may have command of its swallow. Medicines given in a solid form will go into the paunch, and if nauseous, they will give a distaste to the contents of the stomach, and prevent rumination, which is attended with danger.

S. W.'S NOTES FOR THE MONTH.

IT COSTS TOO MUCH.—Ask a farmer why he don't farm better, take more pains to make, save, and apply manure to his crops, and he will say, "it costs too much." Ask him why he don't put his land in better order, plant in better season, tend his corn better, and earlier, that it may be ready to make the coming draught available; his reply is, "it costs too much." Ask him why he don't fall plow his old meadows, so that the frosts of winter may kill the worms and pulverize the heavy loam ready for a spring crop; his reply is, I am too much hurried in the fall to break up sward, and to hire, "it costs too much." Ten to one he urges the same reason in the spring, why he hurries the seed into a half-tilled field, that his work all comes at once in the spring, and to hire, "it costs too much." If Providence does not interfere and give a season just right to aid slovenly tillage, this man's crops will not pay even for the stinted labor bestowed on it; but in the event of a short crop, the season bears the blame. Thus this unfortunate man goes on stultifying himself from year to year, in the implicit belief that because he takes as much pains to grow a crop as his father did, it is the fault of the season that he don't get as good crops as his father did. If you tell him that his soil is worn down and exhausted, he will reply that he clovers and plasters just as his father did. If you tell him that a green crop cannot forever compensate for the loss of nitrogen carried away by a succession of cereal crops, and that he must make and apply more stable manure, nine times out of ten he will turn the subject and talk of something else.

Some farmers seem to think, and I don't know but they are right, that no man has a right to teach or to know anything about farming, unless he has himself already, by bad husbandry, worn out one or two farms. I heard of a farmer in a neighboring county, who keeps a large stock of cattle, stables them in winter, litters them well and makes a great deal of manure. This year his corn crop did not pay for the tillage, because that enormous pile of manure was too formidable to be attacked by the farmer's working force, and he averred "that it cost too much to hire." This great dung heap now stands wasting, a monument of reproach, instead of honor, to him that made it. Had he done like many of his neighbors who now laugh at his folly, kept but little stock, without stabling or litter, and half the time in the highway, he would have had no manure heap to stand as a reproach, and his neighbors would have neglected to laugh at a man who was a *fac simile* of themselves. *Waterloo, N. Y., Jan.*, 1851

THRESHING OATS.

MESSRS. EDITORS:—If the farmers of this vicinity keep pace with the improvements which are now going on around them, they will have to be on the move. A few hours only elapse from the time of shipping such articles as the farmer may have to dispose of, before they are in New York City—the best market in the United States. But here, as in all other markets, the condition in which the article appears has much to do with the price which is received for it.

I wish to say one word to the farmers of this region, and to all whom it may concern, about the threshing of oats with a machine. If the farmer has cattle, it is much the best way to thresh oats with a flail, and the cheapest. I will give the cost, in this town, of threshing 600 bushels, calling it a day's work for a threshing machine:

COST OF THRESHING WITH A MACHINE.

Cost of threshing, $2,00 per hundred,	$12,00
Four horses,	2,00
Four hands,	3,50
Board of seven hands,	2,00
Board of eight horses,	2,00
Total,	$21,50

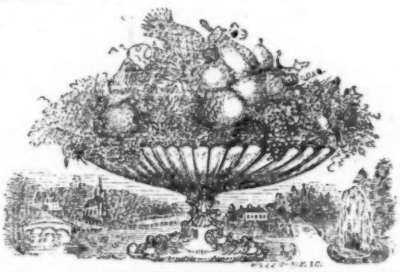
COST OF THRESHING WITH A FLAIL.

Hand, at $13,00 per month, 30 days,	$15,00
Board four weeks,	8,00
Total,	$23,00

Any farmer can tell whether he had rather have oats threshed with a flail, or machine, by the trial; and the improved condition of the cattle will testify in favor of the flail; and unless the thresher be uncommonly wasteful, the farmer will have more bushels of oats, and his straw will be worth double.—Think of it, brother farmers, figure it up, and see how it stands. ARTEL.—*Hornby, N. Y., Dec.*, 1850.

CANADA THISTLES.

THE subject of Canada Thistles is often spoken of, and the modes of eradicating them suggested in the pages of the Genesee Farmer. But some who have succeeded in destroying them once, do not seem confident that the same mode will always be equally efficacious. Now a word on this subject. I have been greatly annoyed with thistles—have supposed it impossible to extirpate them—have mowed them in all times of the moon—have salted them—and have plowed them two or three times in a summer—and still they have been the victors. And they will continue to be the victors, wherever the ground is tilled, unless the design and determination is to till them to death. If plowing is the mode resorted to, it will be absolutely effectual in a single season, if repeated so often that the shoots cannot come to the surface and there enjoy the light and heat. But if plowed only once, or twice, or even thrice, in a season, and the shoots be permitted to come to the light, and grow two or three inches, it amounts to nothing more than a transplanting of the root. A broken piece of root only three or four inches in length, will send up a shoot almost equal in size to the root itself. I am confident that in breaking the roots in plowing our summer fallows and other grain fields, and scattering the pieces by the harrow, the plant is spread more than by the scattering of the seeds on the wings of the wind. In hoed crops they can be entirely destroyed in a single season, by going through the field as they appear, and with the hoe cutting them off a little below the surface. But even then, the inch of root thus cut off must be turned up so as to wilt and dry, or it will continue to grow. In small patches, as in the garden, and ornamental grounds around the mansion, I have entirely destroyed them in a single season by cutting them below the surface with a weeding trowel, as often as they appeared. The process of repeated plowing, as stated herein, when the patch is extensive, or the use of the hoe or trowel as suggested above, can be confidently relied upon as entirely effectual. B.



Horticultural Department.

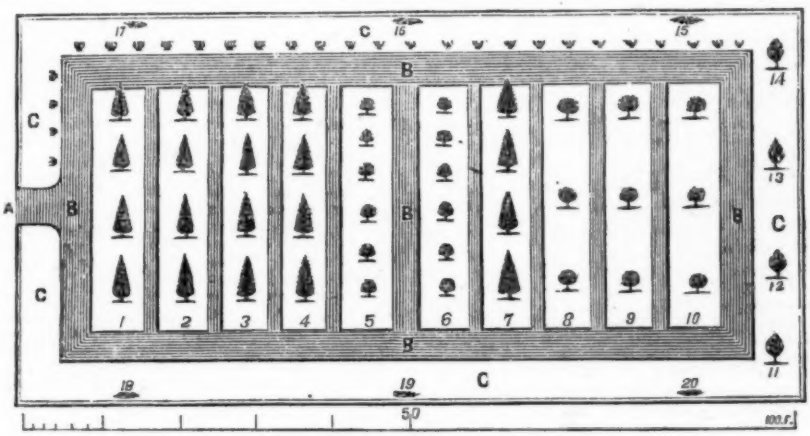
EDITED BY P. BARRY.

A SMALL FRUIT GARDEN.

A very large number of persons in our cities and country villages have little gardens, that if well managed might produce a considerable amount of fine fruit, and be a great source of recreation and amusement at the same time. Managed as they generally are, filled with half a dozen standard trees that take five or ten years to come into bearing, they are comparatively of little account. Very few persons who possess such gardens as these, have sufficient leisure to enable them to cultivate culinary vegetables; and as in most places these can be purchased for less than it would cost to hire labor to grow them, the garden, in very many instances, is left to weeds, or a very poor, weedy, and unprofitable crop. To such persons we present the annexed plan of a little garden, 50 by 100 feet, planted entirely with *dwarf fruit trees*, all of which may be in bearing the second or third year from planting.

EXPLANATION OF PLAN.—A, is the entrance gate, four feet wide. B, a walk, four feet wide, all around and across the center of the garden. C, a border, five feet wide, between the fence and the walk. It will be seen that the rows are numbered, beginning at the one next the entrance. Nos. 1, 2, 3, are pyramidal pear trees on quince stock; No. 4, pyramidal cherries; Nos. 5 and 6, two rows of dwarf apple trees, one on each side of the center crosswalk; No. 7, pyramidal or dwarf standard plum trees; Nos. 8, 9 and 10, low standard peaches; Nos. 11, 12, 13 and 14, four quince trees in the end border; Nos. 15, 16 and 17, are apricots trained on the fence which has the coldest aspect; Nos. 18, 19 and 20, grape vines trained on the fence with the warmest aspect. One of the fence borders is filled with gooseberries and currants, four feet apart, and the other we will suppose occupied with strawberries, or a few early vegetables may be grown among the trees, but not within less than three feet of the base of the stem.

Here, by this arrangement, we have twelve pyramidal pear trees; four pyramidal cherry trees; twelve dwarf apples; four pyramidal plums, or if grown as dwarf standards, three; nine low standard peach trees; four quinces; three apricots; three grape vines; a dozen gooseberries; a dozen currants; besides space enough for a couple dozen raspberries and one hundred strawberries—in all, about fifty trees besides the small fruits. This, it may be said, is a very large number of trees for so small a place; and so it is; but not one more than we feel very certain can be managed advantageously, if the proper system be adopted. The pyramidal trees are eight feet apart



PLAN OF A SMALL FRUIT GARDEN.

every way; the dwarf apples five feet; the standard and peach trees twelve feet apart in the rows, and the rows eight feet apart; the quinces twelve feet apart in the border; the trained apricots and grape vines, thirty-three feet; and the currants and gooseberries, four feet.

The walks may appear narrow, but in such a small garden horses and carts are not necessary; all the manures can easily be carried into and through them by means of the wheel-barrow, and four feet gives ample room for the use of this machine. The main walks have been placed around the outside, leaving only a border suitable for espalier trees. This arrangement gives the standard trees the fullest benefit of the light. Those who prefer a smaller number of fruit trees, and some space for vegetables, can alter the arrangement to suit their tastes or wishes. In such a case, it might be better to run the walk through the center, retaining the crosswalk as in the cut, and plant pyramidal and dwarf fruit trees in a border, eight or ten feet wide, along the sides of the walk, only leaving all the interior for vegetables.

Thirty or forty trees might be introduced in this way, and leave a considerable amount of space for other crops. Between the rows of trees there is a small path two feet wide shown in the figure, intended only for the person who attends to the trees, and not as an ordinary walk. It must not be treated as a walk, but cultivated as any other portion of the ground. For the first three or four years a row of strawberries, or some vegetable crop, may be grown on each side of these paths without interfering with the trees. In this case, eighteen inches only will answer just as well as two feet.

THE SOIL for such a garden as this should be trenched to the depth of *not less than two feet*, and be made of a suitable texture and richness by the use of composts and manures, at the time of trenching. As a general assortment of fruit trees are to be grown upon it, the texture should be of that character which experience teaches us is tolerably well adapted to all species. This is a friable loam, between the sandy and the clayey. The fences should be eight feet high, in order to render them suitable for the training of the vines and apricots.

SELECTION OF FRUITS.—In regard to the trees, we would select the pears on the quince, and of one year's growth, because they are more easily moulded into the desired forms. The cherries on mahaleb stock, and certainly not more than one year's growth. Apples on paradise, one or two years—one year old cost less and are just as good. The plum, two years old, on any good stock, if dwarfs cannot be had. Those budded or grafted on the wild plum will be more dwarf than on the horse plum, or such large growing species. The peaches will be better on plum stocks, if the soil be somewhat stiff, and they will also be more dwarf than on their own stock. In either case they should be one year old only, and should have stems not over two and a half feet high; the heads to be kept round and compact by annual shortening of the young shoots. Apricots, one year old, and on same stock as the peach, according to soil. Quinces, two years old. Grapes, one or two years old.

SELECTION OF VARIETIES.—This is an important matter. Those that are best adapted to the stocks recommended, and at the same time of the best quality, and ripening at different seasons, should be selected. For Western New York we would make such a selection as the following:

PEARS.—*Summer*—Bloodgood, Dearborn's Seedling, Bartlett. *Autumn*—Beurre Diel, White Doyenne, Duchess d' Angouleme, Louise Bonne de Jersey, Swan's Orange. *Winter*—Beurre d'Arremberg, Glout Morceau, Vicar of Winkfield, Easter Beurre. If a very large and productive cooking variety is preferred, the Pound might be substituted for the Easter Beurre. These all succeed well on the quince, are easily formed into beautiful pyramids, and are of the first quality besides.

APPLES.—The largest, fairest and best varieties should be chosen, and principally summer and autumn varieties. Red Astrachan, Sweet Bough, Early Harvest and Summer Rose, for Summer. Alexander, Gravenstein, Hawthorndean, Hawley, Fall Pippin, Duchess of Oldenburg, Dyer and St. Lawrence, for autumn.

CHERRIES.—May Duke, Belle de Choisey, Yellow Spanish, and Belle Magnifique.

PLUMS.—Green Gage, Lawrence's Favorite, Washington and Reine Claude de Bavay.

PEACHES.—Early York, Cole's Early Red, Crawford's Early, Cooledge's Favorite, Haines' Early, Red Cheek Melocoton, Old Mixon Free, Snow, and Lemon Cling.

APRICOTS.—Early Golden, Large Early, and Moorpark.

GRAPES.—Black Cluster, Isabella, and Catawba.

QUINCES.—Orange and Portugal.

CURRANTS.—Red Dutch, White Grape, Cherry, and Victoria.

The cost of such a collection of trees can be readily ascertained by reference to any Nursery catalogue. It need not exceed $25,00.

MIXED PEAR ORCHARDS OF DWARF AND STANDARD TREES.

ON this subject there has lately been a good many inquires from various quarters; we therefore copy from the Horticulturist for January, the following account of the beginning of an experiment of this sort by S. B. PARSONS of Flushing, L. I., the senior partner of the well known nursery firm of PARSONS & Co.:

THERE are few modes of culture that have made more rapid progress in the United States, than that of the pear upon the quince stock. Ten years ago, these dwarf pears were found in very few gardens, and then only as specimens valuable for their novelty. They were even, until a very few years since, esteemed temporary in their character, and were never planted in a permanent orchard. While this opinion may be to a certain extent true, or rather, while we have no evidence to controvert its truth, and while the pear on its own root must always have the preference in a permanent orchard, yet those on quince may always advantageously have a place in every orchard, and may be profitably cultivated for market fruit. That this opinion is becoming more prevalent, is evinced by the large sales of pears on quince that are made annually, in various parts of the country. To ensure success, they require very different treatment from those on their own root, and as a few years experience may be of value to some who are about planting, I will briefly relate the course that I have pursued with satisfactory results.

Some few years ago, becoming convinced that the profits of the nursery business could not be relied upon, I decided, with our friend RIVERS, to cast out another anchor to windward. I prepared at first only four acres, intending with these to test the experiment, and then, if successful, to plant my whole farm.

Although much fruit has not yet made its appearance, the fruit buds promise me so abundant a crop another year, as almost to warrant me in planting to a very large extent.

The field I selected was an old pasture ground, with light loamy soil, but not inclining to sand, and a subsoil of hardpan. This I planted with corn until the ground was well mellowed, and then put upon it two sloop loads, or 3,000 bushels of stable manure, worth on the ground, $175.

The orchard was then planted with pears on their own root, twenty feet apart. Between these were planted pears on quince, ten feet apart, each row being thus ten feet apart, and the trees in each ten feet. Each alternate row is thus all pears on quince, or half on pear and half on quince, and the whole orchard contains 1,760 pears, 1,320 being on quince, and 440 on their own root. By thus planting, I think I gain a double advantage. Those on quince come in bearing soon, and will produce a good crop while the others are growing, and those on pear will undoubtedly be sufficiently large to produce a good crop, and even to occupy the ground to the exclusion of the others, long before those on quince will decay, if such decay ever should take place.

Pears on quince require high garden culture, and it is my practice to put upon this orchard two sloop loads of manure every year. The first year after planting, the orchard was cropped with corn, which I found to be injurious to the trees. I have since cropped with potatoes and sugar beets, alternately, and with good management, the crop of these can be made to pay for the manure, and sometimes for the labor. With the exception of a single row, all those on their own root are of one variety, the *Lawrence*. This variety originated on Long Island, is hardy, an early and abundant bearer, and a good grower. The fruit of medium size, nearly equal to the Virgalieu (Doyenne) in flavor, is in eating from mid-autumn to mid-winter, and will keep and ripen in a barrel, like apples. Its uniform price in the market in autumn, is five dollars per bushel, and at its latest period of maturity, when no other pears can be found in market, it would probably bring ten to fifteen dollars per bushel.

Of the varieties on quince, I have only planted six.—*Glout Morceau, Vicar of Winkfield, Louise Bonne de Jersey, Winter Nelis, Lawrence, and Beurre d'Aremberg.* With the

two latter the orchard is not quite finished, owing to the difficulty in obtaining them. It is always quite as uncertain to form an estimate of a crop of fruit, as it is for our Boston friends to calculate the amount of money they can make from the 250 chickens hatched from the 200 eggs, laid according to guarantee, in 276 successive days, by the pure white Shanghae hen, which may have cost fifty dollars. But after making all reasonable allowances, and finding to-day, upon some of my Vicar of Winkfield trees planted in the spring of 1849, from fifty to seventy-five fruit buds each, I shall be somewhat disappointed if those on quince, in the fifth year from planting, should not produce one dollar per tree. The same result I hope to obtain from those planted on their own root, in the tenth year, after making all reasonable deductions from loss by blight. It will not be safe to estimate that the crop between the trees will always pay the expense of cultivation. With good management, it may do so the first few years; but as the trees grow, the roots will gradually occupy the space between them, when no crop can be grown, although high manuring will still be required.

There may be, and we know in the experience of some there have been, obstacles in the cultivation of this fruit, which have not yet obstructed the advancement of my trees, and it may not be safe for all to estimate according to the preceeding statements. Such, however, are the results of my experience; and while it may be expedient to make large allowances for difficulties which may hereafter present themselves, I cannot doubt, that with the present almost entire destitution of good pears, in all the markets, and the facilities of transporting them to England, I should be fully justified in planting much more largely than I have yet done.

ANSWERS TO CORRESPONDENTS.

GRAFTING THE ENGLISH WALNUT.—(J. D. A., Washington Co., Ohio.) It can be grafted on either the black walnut or butternut. Take the scions from the lower end of the shoots, next the old wood, where there is least pith. Cut the scions early, and graft before the stocks begin to grow. Bud roses like any other trees, from June to September. Graft in the cleft manner in the spring, using firm, well ripened shoots for scions.

HARDY PEARS.—(J. C. BRAYTON, Aztalan, Wisconsin.) Bloodgood, Summer Francreal, Buffum, Beurre Diel, Gansel's Bergamot, Dix, Flemish Beauty, Fulton, Seckel, White Doyenne, Swan's Orange, Oswego Beurre, Glout Morceau, Princess St. Germain, Vicar of Winkfield, Winter Nelis, and Pound. We do not know the Perry Russet apple.

(GEORGE F. COOK, Lake Co., Ohio.) The blossoms of your grape may be killed by frost, or there may be some deficiency in the soil. We could answer more correctly if we knew the varieties. Give the one that does not bear a dressing of wood ashes, say a half peck, spaded or forked in around the roots.

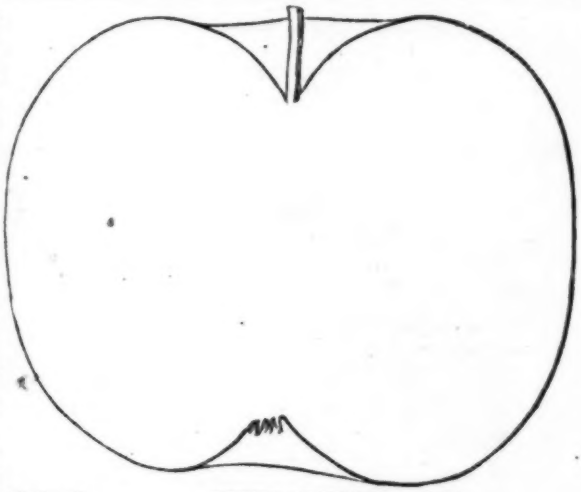
(I. C. B., Groton, N. Y.) Peach stones should be frozen. Walnuts should be kept in moist sandy earth. Plant the nuts in spring, three or four inches apart in drills, and two or three inches deep. Next season, transplant into rows two or three feet apart, and eighteen inches apart in the rows. In two or three years they will be fit for final planting.

(Dr. P., Saginaw City.) There is no English translation of the *Bon Jardenier*. It can be had in French through the New York importers. The flower seeds can all be obtained of leading seedsmen of Boston and New York. A catalogue has been forwarded.

(FAITHFUL READER.) We would advise you to procure DOWNING'S THOMAS' or COLE'S fruit books, they will give you all the information you desire. Most of the subjects have been treated of in the back volumes of the Farmer. Prune and cut scions now, and graft in April.

(C. J. C., Painted Post, N. Y.) The "bug" you mention we presume is the *black slug*, very common here, "destroying the leaves of cherry, pear, and other trees, during the month of June. Sprinkle the trees on which you may find them, with lime or ashes, and you will find it effectual.

(J. S., Chemung county, N. Y.) Your trees will not injure in the least, if the roots are covered with earth. You can plant them in the spring as soon as the ground is in order.



DUTCH MIGNONE APPLE.

THIS proves with us a superb and excellent apple. For two or three years past, we have gathered crops from a specimen tree, that rival in size, beauty and excellence, the best of all the varieties we cultivate. Mr. DOWNING says, truly, "that it is one of the greatest acquisitions we have received from abroad." The tree is very vigorous and productive, and the fruit always fair and fine. Size, large—three to three and a half inches in diameter, on an average. Form, round and regular. Color, a golden yellow, quite covered with a deep red and mottled in the shade—in some spots, and especially around the stem, slightly russetted. Stalk half an inch long. Calyx, open in a broad regular basin. Flesh, white; firm at first, like the *Ribston Pippin*, but becoming tender as it approaches full maturity; juicy, rich and high flavored. It is an excellent sort for the garden, as a dwarf. It is now, January 15th, in perfection, but will keep till March.

PREMATURE DECAY OF APPLES, &c.

MR. BARRY:—I would beg to state that last season I raised about fifteen bushels of the Green Newtown Pippin. I took them off carefully by hand, on the 15th of October, and packed them in barrels, some of which had contained salt. The apples have become dry and cracked in two, (especially the largest,) and the skin of many of them is black and decayed, and the flavor quite inferior. Whether the cellar is too warm, or whether they were gath red too early, or what the reason is, I know not. I feel some disappointed. I have seventeen trees of this variety, and these were the first of their bearing. I would say that this is a highly esteemed fruit in this part of the country, and bears early and abundantly, when the trees are properly attended to. The soil is well adapted to such fruit.

I expect I shall have the Northern Spy bear next season. I have fifteen trees of it. If it is equal to the Green Pippin, I shall think it a valuable acquisition. All my knowledge of fruit-raising has been derived from the pages of the Genesee Farmer. I would just ask a little more, on the best method of keeping fruit, especially apples. Whether they should be laid on the cellar floor, covered, or not, or any simple mode you deem best, and at what temperature they will keep best. I have about one hunred trees, of near twenty-five varieties. A correct knowledge of this is somewhat necessary. JAMES SHARP.—*Dumfries, C. W., Jan.* 1851.

It is difficult to say what the cause of the premature decay of the fruit can be. There is some doubt of their being the *Newtown Pippin*. The best way to keep apples, is in clean barrels headed up, in a *dry, cool* cellar. The lower the temperature the better, provided frost be excluded.

Ladies' Department.

LADIES' WORK STANDS.

We give, this month, engravings of two *Ladies' work stands.* The first consists simply of a light frame covered with silk, or any other material that may be preferred, and attached to a common stand. This frame almost any one can make in an evening, and it can be ornamented with fringe or tassels to suit the fancy. The engravings and following remarks are from *Downing's Country Houses:*

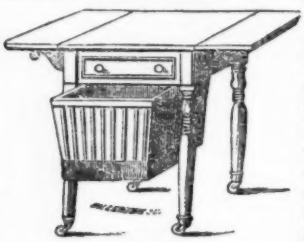


Fig. 1.

"*Ladies' work tables,* (fig. 1,) are popular English furniture for the sitting-room, and are usually made of mahogany or walnut, and fitted up with a silk bag with a fringe, attached to a frame that draws out. This bag is a very convenient receptacle of various articles of needle-work, which otherwise would, perhaps, lie about upon chairs or sofas, to the discomfort of all parties, and the detriment of the work itself.

A pretty and more convenient article for this purpose, and one more suitable to the parlor, is the *basket stand,* fig. 2, being easily lifted and carried about from one part of the room to another — wherever it may be most agreeable to sit. These are made in various modes, either very tastefully and fancifully of rosewood or mahogany, curiously carved, for the villa; or of rustic work, varnished, in the Swiss manner, or of bamboo, after the Chinese fashion, for the cottage. This style is cheap and neat, but persons can exercise their taste in construction."

Fig. 2.

CREDIT THOSE TO WHOM IT IS DUE.

Messrs. Editors:—In a well written article in the November number of the Genesee Farmer, entitled "Agricultural Societies and Exhibitions," you commended the conduct of the Rochester ladies for their exhibition of bread at the Horticultural Show in Rochester, as worthy of imitation in other Societies. The writer cannot commend the conduct of the Rochester ladies, and all others, too highly, who seem disposed to excel in this most useful art, and true feminine accomplishment, to produce with their own hands, in its utmost perfection, "the staff of life." As is justly remarked, in the article alluded to, many societies in this State, and in Massachusetts, during the present year have awarded premiums for the best loaves of bread exhibited. But some of these societies, as we have reason to know, first caught this idea from the remark of the Hon. Marshall P. Wilder, of Boston, made in an address before the Norfolk County Society, of Massachusetts, in the fall of 1849. And in fact, we think to him belongs the credit of introducing this important matter to the notice of agriculturists, and their excellent wives and daughters. Mr. Wilder has labored long and done more, perhaps, to advance the interests of horticulture than any other practical man in the country. And agriculture, too, in many of its branches, has felt his influence. It is with a view, therefore, to credit those who are willing to devote their time and talents for the benefit and improvement of the agricultural interests of the country, that we forward these few lines.

I will say, farther, that the Norfolk Society, before which Mr. Wilder held this language in 1849 —"No father should consider his son *well* educated, till he knows how to gain his support from the soil; and no mother her daughter, however accomplished in all other respects, until she knows how to make *good bread*" — were so impressed with the utility of this part of female education, that at the next annual exhibition of the society, held in September last, sixty-six ladies were competitors for the superiority of their *bread.* They exhibited one hundred and seventy-five loaves, and were awarded two silver cups of the value of twenty dollars, by the President, two silver cups of the value of twenty dollars by the Society, and two barrels of flour, of the value of fourteen dollars. Other societies have caught the suggestion, and have been liberal in their rewards, and another year will doubtless witness a distribution of premiums by almost every agricultural society in the country, for the best quality of *bread,* as well as for the more fanciful products of a delicate hand.

Dutchess.

SIGNS OF IMPROVEMENT.

Messrs. Editors:—In your *Ladies' Department* for December were the following words: "We hope the little good seed sown has not been cast entirely by the wayside." For myself I think that any one who travels our public, or even our by-roads, will see enough to convince him of the fact, that people in general are improving, both in the taste and style of building. To you, and others of the same stamp, are we indebted, in a good measure, for the improvement in the public mind with regard to plans for building, not only dwelling houses, but out-buildings also. Where you would originally see a long, narrow, two story house, half finished with an enormous amount of room, and but precious little comfort or convenience, you now see a neat, tasty little cottage. Of late, I have often seen, on passing along some of our back roads, a neat little love of a cottage, half hid among the stumps of a newly cleared field, showing conclusively to my mind, that the originator had got his ideas of taste and beauty, one step above the old track.

May we not hope to see our brother farmers, and all others, surely and steadily rising toward perfection in that most independent of all callings, until our lands, that now yield twenty, shall yield some sixty, and some "an hundred fold." And not alone among the ladies, will you find those to sympathize with you in your work, but many, many, if not all, of the hard working farmers who take the Genesee Farmer, will honestly and heartily sympathize with you in your endeavors to raise the standard of American agriculture. J. B. C.—*Groton, N. Y., Jan.,* 1851.

Trust him little who praises all — and him less who censures all.

Youths' Department.

THE POULTRY YARD.

In the absence of some engravings which we failed to procure, illustrating the *wonders of vegetation*, we give a chapter on the feathered tribe. We do this with more pleasure, as some of our young friends in their communications have requested us to give as much information as possible about fowls. Now our young readers must remember that we have in our 30,000 subscribers a variety of tastes to please. Some desire all possible information about fowls, the best kinds, the best way to keep them to get the greatest amount of profit, &c. Others are turning their attention to fruits and flowers, and look to the Farmer as their guide. Still others care but little about these things. They want the main crops—corn, potatoes, and wheat—treated of, as it is on these they depend for support. We shall endeavor to give all "a word in season."

THE PEACOCK.

The peacock is too well known to need a lengthy description. The pea fowls are natives of India, where they are now found wild in large flocks.—They are the most beautiful birds that grace the poultry yard. But, like some young folks we occasionally see, they have little but their beauty to recommend them. In regard to their disposition, Brown, in the *Poultry Yard*, gives the following account:

"The natural disposition of the peacock is selfish and gluttenous, and it is only by pampering this weakness that he can be persuaded into obedience and attachment. He is vain, and at the same time ungallant. He is far from manifesting the politeness and attention which the common cock shows towards his mates. The peacock will greedily snatch from the mouth of his hens those tit-bits and delicate morsels which the cock would either share with his favorites, or yield to them entirely. The peahen, in return, cares less for her lord and master, and is more independent of him. Nor does he seem to care much about her admiration, or to make the exhibition of his attractions to secure her notice, but is content, if he can get some astonished hen, or silly bewildered duck, in a corner, to wonder what all the fuss is about." They are in some cases cruel towards the young of other poultry.

THE GUINEA HEN.

The plumage of this bird is singularly beautiful, being spangled over with an infinity of white spots on a black ground, shaded with gray and brown. A white variety is not uncommon, but is less hardy. It is not every one who knows a cock from a hen of this species. An unerring rule is, that the hen alone uses the call note "come back," "come back," accenting the second syllable strongly, from which they are often called "come backs." The cock has only the harsh, shrill cry of alarm, which, however, is also common to the female.

The Guinea cock is what is called *monogamous*, or having but one mate, like the patridge or pigeon. He is, however, very polite and attentive, and in this respect shows much better manners than the peacock. The hen lays month after month with little or no intermission.

THE SPANISH FOWL.

This is a noble race of fowls, possessing many great merits; of spirited and animated appearance, of considerable size, excellent for the table, both in whiteness of flesh and skin, and also in flavor, being juicy and tender, and laying exceedingly large eggs, in large numbers. They are entirely black, and beautiful fowls, but too delicate for our climate.

Editor's Table.

ANNUAL MEETING OF THE N. Y. STATE AG. SOCIETY.—The annual meeting of the State Agricultural Society was held at Albany, on the 15th inst. The following officers were elected for the ensuing year:

President—JOHN DELAFIELD, of Seneca.
Vice Presidents—WILLIAM BUELL, of Monroe; SILAS M. BURROUGHS, of Orleans; LEWIS G MORRIS, of Westchester; ANTHONY VAN BERGEN, of Greene; AUGUSTUS L. CLARKSON, of St. Lawrence; HENRY WAGER, of Oneida; BENJAMIN ENOS, of Madison; RAY TOMPKINS, of New York.
Corresponding Secretary—B. P. JOHNSON.
Recording Secretary—J. McD. McINTYRE
Treasurer—L. TUCKER.
Executive Committee—Ambrose Stevens, John B. Burnett, M. G. Warner, Josiah Bissell, Benj. B. Kirkland.

Rochester was selected as the place for holding the next Fair, and the time set is the 16th of September. Western New York will now have a fine opportunity to show her productions, at the most favorable time, and under the most favorable circumstances. Nothing now remains but for every farmer to do his duty, and the exhibition next fall will not only be *one* of the best, but *the best* ever held.

The price of life membership, which was $50, was reduced to $10 Altogether we are pleased with the acts of the State Society, at their last meeting.

We cannot avoid noticing a rather amusing part of the proceedings that transpired while we were present. A statement was made that a Mr. COMSTOCK had actually discovered "the secret of vegetation," and a committee of gentlemen well skilled in vegetable science, was appointed to investigate and report upon the discovery. We await the result with great impatience, of course.

The address was delivered by A. J. DOWNING, Esq., of Newburgh. Engagements prevented us from hearing it, but we have heard it highly spoken of, as we are sure it deserves to be. The principal subject was, *A State Agricultural School*—a topic quite seasonable and interesting, both for the occasion and the times.

At the *Fruit Exhibition*, there was a very fine display of winter apples, a large proportion of which were from Monroe and Wayne counties. Among them, the *Northern Spy* and *Wagener* were conspicuous and much admired. Some pears were presented, but not until after we had left.

MR. TOWNSEND GLOVER, of Fishkill Landing, exhibited a beautiful collection of artificial fruits, including apples, pears, plums, cherries, and indeed all the fruits. They were the best executed and most natural of any we have ever seen, and we are glad to learn that their merit has been duly appreciated and rewarded by the Society. Mr. G. has received an order for a complete collection for the Society's rooms, and every horticultural society, and nurseryman in the country, would do well to procure a collection. Mr. GLOVER is making arrangements to furnish them on moderate terms. Some very beautiful paintings of the *Northern Spy*, *Wagener*, and other popular fruits, were exhibited by JAMES H. WATTS, of Rochester. They were executed by Mr. JOSEPH PRESTILE, of the Ebeneser Society of Buffalo.

THE FEBRUARY NUMBER.—We intend that our most distant subscribers shall receive their numbers of the Farmer by the 1st of each month, or at farthest within a day or so of that time. In consequence, however, of the unprecedented and unexpected increase of our circulation, we have been so busily engaged in entering the names of our friends in our books, and forwarding the January number, that a little delay this month seemed unavoidable. To all our friends who have so essentially aided in extending the influence of our monthly visitor, we tender our hearty thanks and shall endeavor to give them no cause to regret recommending it to the attention of their neighbors.

POSTAGE OF THE FARMER.—As some Postmasters who have taken an interest in circulating the Farmer, are in doubt as to the postage they are required by law to charge, we re-publish the decision of the Asst. Post Master General.

POST OFFICE DEPARTMENT,
Appointment Office, Dec. 13, 1849.

SIR:—In reply to your's of this date, I have to inform you that the "Genesee Farmer" published at Rochester, New York, is regarded as a newspaper, and should be rated with one cent postage when carried in the mails over one hundred miles, or any distance within the State; and if carried over one hundred miles, and out of the State in which they are mailed, one and a half cents postage.

I have the honor to be, Very respectfully, &c.
FITZ HENRY WARREN.
Second Asst. Post Master General.

EXTRACTS FROM OUR LETTERS.—In our business letters we find many choice things, which, would our space permit, we should be much pleased to present to our readers. Receiving over a hundred letters each day, from all parts of the country, we gain from this source a pretty good idea of the state of public sentiment among our agricultural population. We rejoice that the signs of the times show an increasing interest in all that relates to the agricultural profession. B. T. COOKE, of Binghampton, N. Y., writes—

"The taste for improving the soil—for producing not only the necessaries, but the luxuries of life—for exhibiting the earliest and choicest varieties of vegetables, fruits, and flowers, among our villagers; and for rearing fine stock, poultry, &c., and improving farms, in the "rural districts,"—is becoming a passion with many, and exciting an increasing attention with all."

We have among our voluntary agents many that are young, some enterprising ladies, and a few whose heads are whitened by the frosts of many winters, and whose limbs totter by reason of the infirmities of age. The following is an extract of a letter from HENRY JOHNSON, of Holland, N. Y. We publish it as an example to the young. By industry and temperance, the old man has retained his faculties—has outlived the allotted time of man's life, and now writes a fair hand, and shows both by word and deed, that he is still able to act well his part:

"I have been thinking of giving up the agency of the Genesee Farmer for a number of years, in hopes that some man more able than myself would undertake it; but I can't find him. I am now an old man. (I was born December 26, 1776.) I keep neither horses nor oxen, and it is very hard work for me to get about and walk in deep snow, with very little path; but the importance of an extensive circulation of the Farmer, stimulates me to put the best foot forward; for my district is large. I have spent two days, and to-morrow I think of starting again, and shall try, and keep trying; but I assure you it is hard work for my lungs, as well as for my body and legs. In addition to my time and fatigue, I always have some postage to pay. I had to break a path into the woods alone, and to shovel and wallow about 130 rods; but I accomplished it, procured a team, and got up some wood. This evening I am trying to write, so as to be ready to start on my mission to-morrow; but I must give it up until morning.

"*Christmas morning*—At fifteen minutes before four I arose from bed. We generally take breakfast before six o'clock This is the way I work to get subscribers for the Farmer. It is the most difficult time in the whole year to get subscriptions, for the tax-gatherer will soon be calling. Tell others to follow my example—drink no spirits nor use tobacco—and you will have an overwhelming subscription. Tell them this from "Old '76." (this is the appellation they give me,) "old go-ahead." Do you like to hear an old man boast?

"I have had better success to-day than I have had at any other time—I send you the names of seventeen subscribers It is laughable to see how many ways people find to put me off. But I have got through for this year, and have made out better than I expected. I have sent five dollars, and shall try again at our March meeting, and keep trying as long as I can talk."

W. A. BACON, writing January 11th, from Paris, Ky., and sending a large list of subscribers, makes the following remarks:

"The Horticultural Department, presided over with so much ability by friend BARRY, suits our latitude better than the Agricultural; besides, the cultivation of fruit is receiving increased attention. The winter, thus far, has been very mild—very little snow or ice yet. The last ten days have been spring like; indeed, it seems like spring to see plows running, and the thermometer near summer heat."

OSCAR F. WARREN, of Erie county, who has for many years sent us a large list of subscribers, as an apology for coming a little short this year, encloses us his marriage notice. This will not do, Mr. W., we must hold you for a larger list than ever, under so favorable circumstances.

We should be pleased to give many extracts from our letters, but space at the present time forbids. We may give others in the next number

MONROE CO. AG. SOCIETY—ANNUAL MEETING.—The annual meeting of this Society was held on Saturday last, at the office of the Farmer. The attendance was larger than usual, and considerable interest was manifested in the proceedings and prosperity of the association. The report of the proper officer exhibited a handsome balance in the Treasury. Officers were elected for the current year as follows:

President—LYMAN B. LANGWORTHY, of Greece.
Vice Presidents—CALVIN SPERRY, of Gates; J. M. BABCOCK, Irondequoit; ELISHA HARMON, Wheatland.
Treasurer—JOHN RAPALJE, Rochester.
Rec. Secretary—J. VICK, Jr. Rochester.
Cor. Secretary—D. D. T. MOORE, Rochester.

FIELD CROPS.—The first premium on Carrots, $6, was awarded to NATH'L HAYWARD of Brighton—his crop producing 1035 bushels per acre.—A premium of $4 was awarded to ALFRED FITCH of Riga, on a crop of Mangel Wurtzel—no competition.

ADDITION TO CLUBS.—Those who have formed clubs of *eight* or more, can make additions at the lowest club terms, (*three shillings.*) Those who have forwarded five can enlarge their clubs to eight, by forwarding one dollar. Some of our friends send on the price of single subscription, when making additions to their clubs.—This we do not ask. We can supply the January number, and any back numbers, as the Farmer is stereotyped. We can furnish numbers of last year to any who may have lost them, and wish to get the volume bound We have also on hand bound volumes from 1845. At this time the Farmer was changed from a quarto to its present form, and the volumes are uniform, and can be had at 50 cents each, bound in paper, or 63 cents bound in boards. We do not require that all the papers in any club should be sent to one office, as some suppose. Our friends must consult their convenience in this matter.

YOUATT ON THE HORSE.—We have received from the publishers, DERBY & MILLER, of Auburn, a new edition of YOUATT on the Structure and Diseases of the Horse, with an account of the breeds in the United States, by H. S RANDALL. This is a fine edition of YOUATT's celebrated work.

A TREATISE ON HOT HOUSES. By ROBT. B. LEUCHARS, Garden Architect, Boston. JOHN P. JEWETT & Co, Boston, 1851.

We have only space in the present number, having been absent while the greater part was made up, to announce the appearance of this work. It treats of the construction, heating and ventilation of Hot-houses, Green-houses, Conservatories, Graperies, &c., illustrated with numerous engravings. From the character of Mr. LEUCHARS, as an experienced, practical man, in his profession, we have no doubt that it will prove a very valuable and timely addition to our garden literature. We shall examine it and say more of its contents hereafter. Copies can be supplied at this office. Price $1,00.

Mr. LEUCHARS offers his services to the public, in this and kindred departments of horticulture, and we hope he will receive ample patronage.—E.

WINTER EXHIBITION OF FRUITS.—The Horticultural Society of the Valley of the Genesee, gave an exhibition of Fruit on the 11th of January. It was the finest winter exhibition we have seen in a long time. The apples and grapes were fine and abundant. Our friends must pay more attention to the cultivation of Winter Pears.

BULLARD'S PANORAMA OF NEW YORK CITY.—We accepted an invitation from the proprietor, and visited this exhibition a few days since. If any of our readers should have an opportunity, they will be well paid for their attendance, and learn something of the great metropolis, without the sacrifice of money and comfort with which that knowledge is generally acquired.

A NEW CHURN.—We have been requested to examine a new Churn, the invention of R. W. & D. DAVIS, of Rogersville. We have not yet found time to examine it carefully, or test its merits. It may be seen at the Agricultural Warehouse of RAPALJE & BRIGGS, Rochester.

APPLE SCIONS.—Those who intend to improve their orchards, are referred to the advertisement of Mr. WATTS. Mr. W. has long taken an interest in the cultivation of choice varieties of fruit, and our friends may devend on getting whatever they order, genuine.

M. B. BATEHAM, of the Ohio Cultivator, says he has been presented with a bottle of *real temperance wine* made in Ohio, "*expressly designed for ladies and clergymen.*" As the editor belongs to neither of these classes, we presume he will not be so presumptions as to taste the "*expressly*" forbidden beverage.

GODEY'S LADIES' BOOK.—Among the most beautiful publications of the country are the *Ladies' Books. Godey's* for January and February are worth the cost as specimens of art Some of the *model cottages*, however, are rather poor models.

COMMUNICATIONS.—We have still on hand, and even in type, many articles furnished by our correspondents, which we shall make room for as fast as possible. The fact that articles do not appear for a month or two after their receipt, is no evidence that they are rejected.

C. KELLY & Co., nurserymen, of Hamilton, C. W., will act as agents for the Genesee Farmer, and forward orders from that vicinity.

MORGAN STOCK.—We are informed by a correspondent, now on a tour through the southern tier of counties, and who is a connoisseur in such matters, that WM. J. DORR, of Scottsville, has a couple of beautiful horse colts of this breed, sired by that excellent representative and descendant of the late "Gifford Morgan," "General Gifford." They are from a dam very much resembling, in fire, energy and general appearance, the Morgan race. These colts are blood bays, colored alike to a shade, with heavy black manes, tails, and legs, of fair size, with all the muscle and symmetry for which the sire is celebrated.

LONG AND ROTTEN MANURES.—Were we not guided by experience, perhaps we should be led to imagine there would not only be a saving of the ammoniacal salts, phosphates, &c., by applying manure fresh to the soil, but that all soils would be equally benefitted by being thus treated. Not so. The chemical action of the manure will be equally efficacious on light and heavy soils, but this is more than counteracted by the injurious mechanical action. Whilst unfermented dung will prove most beneficial to our clays, half rotten dung will be most efficacious to soils of a medium texture, and rotten dung to our light ones. Decomposed farm-yard manure is no better adapted for every soil than one man is adapted for every profession.—*Ag. Gaz.*

To Officers and Soldiers of the Revolution, their Widows and Heirs.

FOUND, about the 1st of January, 1851, a large quantity of the old original records of the services of several thousand *Officers*, (in the Commissary and Quarter-Master's Department,) *Surgeons, Artificers, Wagon Conductors, Wagoners, Teamsters, Carpenters, Blacksmiths, Boat Builders, Fatiguemen, &c., &c.*, in the war of the Revolution. These records have been preserved by descendants of Officers, and are admitted as authentic in establishing claims against the Government. Officers, soldiers, their widows, or heirs, who have omitted to assert their claims, or failed to obtain their just dues, when application has been made, for want of evidence or assistance in prosecuting their claims, are informed that the subscriber having been engaged for nearly ten years past in prosecuting claims for Pensions, Bounty Lands, &c., collecting documents and statistics relating to the Revolution, he is prepared to aid, promptly and vigorously, all persons who require the assistance of an agent or attorney in prosecuting claims before Congress, or any of the departments at Washington.

Persons, or the widows of such as served in the capacity of either class above named, *who have been pensioned*, will find it to their interest to send a statement of facts to the subscriber, as but few of those received what was justly their due.

Letters of inquiry or application should be addressed to the subscriber, *post-paid*, at Washington City, D. C.

February, 1851. WILLIS G. WADE.

KETCHUM'S PATENT MOWING MACHINE.

THE subscribers having purchased the entire interest of the inventor, Mr. Wm. F. Ketchum, and also the interest formerly owned by S. W. Hawes, are now manufacturing the above Machine in the city of Buffalo. The Machine has been greatly improved, and is fully capable of performing all we recommend it to do.

The price of the Machine is $100.00 with one sett of knives, and $110,00 with two sett of knives.—Cash in Buffalo.

Any information wanted, or orders left with Mr. GEORGE SHEFFER, Scottsville, Monroe Co., or Mr. MORGAN BUTLER, New Hartford, Oneida Co., will meet with prompt attention.

February, 1851. G. W. ALLEN & CO.

To Nursery Gardeners.

A GENTLEMAN wishing to establish a Nursery Garden, desires to enter into arrangements, for that purpose, with a person who understands the business. 8 to 12 acres, or such other quantity as may be required, of excellent land will be furnished, with a comfortable dwelling house, and the use of a Green House, rent free, till the business could yield a return. Situation—Two miles from Kingston, Canada, on the high road. A very moderate capital would suffice.

Apply (if by letter, post paid,) to Messrs. ELLWANGER & BARRY, Rochester, N. Y., or to J. H. W., Kingston, Canada.

February, 1851.

Miner's Bee Hive.

THIS beautiful and highly valuable practical Hive, is unsurpassed by any other in the United States. The Rights are in pamphlet form, with full engravings, and ample directions to make it. Price $2 only; sent by mail to any section of the country. This is positively the only Hive of *real* merit to be had.

Also, the AMERICAN BEE-KEEPER'S MANUAL, 350 pp., 35 fine engravings; the most popular work ever published on the culture of bees. Price $1; sent by mail also. Address to this office, *post-paid*.

Gen. Farmer Office, Rochester, June, 1850. [6-tf]

THE NEW YORK REAPER.

MANUFACTURED BY SEYMOUR & MORGAN.

THE undersigned after many years experience in the manufacture of the different Reapers heretofore used, are at last, by the application of new principles lately patented, and to which they have the exclusive right, prepared to offer to the farmers of the United States a

PERFECT REAPING MACHINE,

which in durability of construction, perfect manner of cutting grain, and the ease with which it may be worked, *has never been* equalled.

The following are some of the advantages possessed by this Machine over any other heretofore used:

1. The Finger-piece is placed within the circumference of the driving wheel, and the other ground wheel placed nearly opposite, and greatly increased in size, which lessens the power necessary to work the machine at least one-third, and does away with all difficulty in backing and turning.

2. The method of changing the cut is so improved that it can be done instantly on the small ground wheel by means of a lever, and on the driving wheel in much less time than in any other REAPER.

3. The sickle or knife is constructed of patent hollow teeth which CANNOT BE CLOGGED, and which in case of accident can be repaired by any good blacksmith without the least difficulty.

4 The man is placed on the backside of the platform where he has his work directly before him and is capable of performing it in a perfectly natural and easy manner, when compared with the old way of stretching from behind the gearing, with his back towards the team.

5. The gearing is of new and improved construction, combining GREAT STRENGTH AND DURABILITY with perfect simplicity of arrangement, and possesses *Great Advantages*, in many respects, *over all other* similar machines.

We are now manufacturing several hundred of the above Reapers for the Harvest of 1851, and are prepared to receive orders of purchasers for the same Our terms of sale, warranty, &c., will be *as favorable as ever*, and we shall spare no pains to make our work satisfactory; as we are

BOUND TO KEEP AHEAD

of all other manufacturers in the quality of our Machines. We will cheerfully give further information to any one who may address us personally or by mail. SEYMOUR & MORGAN.

Brockport, N. Y., Feb., 1851.

We would here take occasion to refer to a difficulty with C. H. McCormick, growing out of the fact, that we last year manufactured *and sold* a Machine of our own getting up, instead of paying him a patent fee for the privilege of making his "Virginia Reaper" which had been thoroughly tested, and found to be very unpopular with a large portion of the farming community.

The Machine made by us did not in the slightest particular infringe upon any patent of the said McCormick, but the plea was made use of as a bug-bear with which to frighten farmers from the purchase of our Machines, hoping thereby to dispose of some portion of a large number of Virginia Reapers which are now scattered throughout the country (condemned) and now unsold. The Machine we are manufacturing contains none of the parts complained of as infringements, which was only in the position of the Raker; having now placed our Raker in a more favorable position that matter of dispute is done away with and no person need fear the complaints of the maker of the "Virginia Reaper" as he will naturally feel sore that he can no longer monopolize the business of manufacturing Reapers to the great damage of all interested except himself.

The following are extracts from Letters received by us:

West Liberty, Logan Co, Ohio, Aug. 1, 1850.

GENTS:—It is with satisfaction that I inform you that the Reaper I purchased of you, performed equal to my highest expectations, and I think it can justly claim precedence over either Hussy's or McCormick's, not only in the construction of the machinery but also in the manner in which it cuts, and performs its work. The greatest improvement is in the cutting apparatus which is far superior to any other in use here, and is just what has long been wanted. All who have seen your Machine have expressed for it a decided preference to any other. Yours, respectfully,

J. P. BUFFINGTON.

Urbana, Cham. Co., Ohio. Oct. 18, 1850.

GENTS:—I bought one of your Reapers for last harvest, and cut my own harvest of about 150 acres with it. The Reaper performed to my entire satisfaction; it will cut wet and grassy grain and corn stalks without choking. I have seen all the other kinds of Reapers work and believe yours to be the best Reaper ever introduced into this State. Yours, &c., ANDREW MCBETH.

Covington, Wyoming Co., N. Y., Aug. 10, 1850.

MESSRS. SEYMOUR & MORGAN—GENTS:—We have just finished cutting our wheat, and a very bad harvest we have had, it being bad weather and our wheat very badly lodged down, notwithstanding your Reaper has done well, taking up our lodged grain beyond our expectations, we think it a good way to cut grain doing it with less expense than any other way.

Yours, respectfully, JAMES GAY.

Janesville, Wisconsin, Nov. 1, 1850.

MESSRS. SEYMOUR & MORGAN—GENTS.—I own one of McCormick's, one of Hussy's, and one of your Reapers; upon giving each a fair test the present season I found that where both others clogged so that it was imposible to use them, yours worked like a charm; and I have no hesitation in pronouncing it much the best in use.

FREEMAN HITCHCOCK.

Urbana, Cham. Co., Ohio, Oct. 19, 1950.

MESSRS SEYMOUR & MORGAN—GENTS:—I purchased one of your Reapers for last harvest. I have seen the different kinds of Reapers work and consider yours far superior to any other.

Yours, &c., EMANUEL SHOUPE.

DENSMORE'S SELF-RAKING REAPER.

THIS Machine has been brought to its present state of perfection, at great expense and labor bestowed by one who has had much experience in the practical use of different kinds of Reapers, and a thorough test of its capacities in the last harvest, has proved it to be one of the most important labor-saving Machines of the day. It combines all the advantages found in the different kinds of Reapers in use, while it possesses the important additional advantage of being a *Self-Raker*.

The grain is raked off at the side of the Machine, into snug, straight gavils, by a very simple arrangement, without any hand labor, in better condition for binding than can be done by a man riding upon the Machine, and is dropped far enough from the standing grain to be out of the way of cutting the next swath, so that a whole field can be cut before any of it is taken up.

The saving of labor in using this Reaper over others, will soon pay the whole expense of the Machine. It requires but one man to operate it. One hand and two horses with it, will cut as much grain as seven cradles and leave it in condition that it can be taken up with a third less labor. The driver has at all times control of the rake to make the gavils of any size he may desire, and of uniform size in uneven grain, by means of a lever that is moved by the slightest touch of the foot.

It is simple in its construction and operation, substantial and durable, easy to keep in order, possesses most convenient arrangement for the height cut, from five to fourteen inches, and is of light draft compared with other Reapers. Application for letters patent has been made on these improvements.

BACKUS, BARNETT & Co., of Brockport, have the exclusive right of manufacturing these Machines, in this section, for the next harvest. This firm have recently fitted up an extensive establishment for furnace and machine work, and are manufacturing Rogers' Wheel Cultivators, Grain Drills, a large assortment of Stoves, Plows, and all kinds of Castings; and their experience heretofore, in manufacturing Reapers, their well known reputation as mechanics, and their facilities for doing good work, give the best assurance they will be well built. Those desiring farther information, by writing to the subscriber at Brockport, N. Y., or to Backus, Barnett & Co., will have sent to them a circular containing a description of the Machine and certificates from those who used it last harvest.

We invite the early attention of all those who may desire to obtain Reapers. They will be warranted.

The subscriber continues the business of manufacturing Straw Cutters, and is prepared to furnish to order the best article in use.

BYRON DENSMORE.

Brockport, N. Y., Feb., 1851.

NEW YORK STATE AGRICULTURAL SOCIETY LABORATORY.

OLD STATE HALL, ALBANY.

THE object of the Society in establishing this Laboratory is to furnish those interested in agricultural pursuits an accessible, reliable and ready means for obtaing analyses of soils, animal manures, peat, marls, limestone, gypsum, &c., together with all other information connected with the science of agriculture, which practical chemistry, at its present advanced state, is capable of affording.

The charges for Analyses have been arranged by the Society as follows:

Complete quantitative inorganic analysis of a soil, limerock, gypsum, peat, marl, animal manure,	$5,00
Complete proximate organic analysis of a manure, marl, peat, soil,	5,00
Determination of the per centage of water, dry matter, and ash in manures, &c.,	2,00
Analysis of mineral or spring water,	7,00

The above fees to accompany all samples or communications. No analysis will be allowed to pass out of the Laboratory until paid for.

The analysis of ores, miaerals, rocks, commercial articles, &c., also attended to with care.

For analysis, enough of the above substances should be sent to make half a pound when dry. Of mineral or spring waters, about one gallon is required.

☞ All samples and communications to be forwarded, post paid, to Dr. J. H. SALISBURY, Chemist to the Society, or to B. P. JOHNSON, Esq., Secretary, &c., *Old State Hall, Albany.*

February, 1851.

Farm for Sale.

SITUATED in Brighton, within two miles of the center of the city of Rochester, and within half a mile of the city line, containing about 67 acres, with good buildings, fruit, and other improvements.

For further particulars enquire at the office of the Genesee Farmer.

February, 1851.

PROUD TRIUMPH OF GODEY'S LADY'S BOOK. AN AMERICAN MAGAZINE.

SINCE publishing the Lady's Book for January, we have, up to the moment of penning this, received an increase to our list that has been unprecedented. This shows that our efforts in the good cause of

AMERICAN LITERATURE AND AMERICAN ARTS

is appreciated. No foreign aid is needed by the proprietor of Godey's Lady's Book. Our January number, which has, we believe without a dissenting voice, been pronounced the gem of the month, is all of *American Manufacture*. We have in store numerous novelties. An opportunity has now been given to make a comparison between our engravings of SCRIPTURAL SUBJECTS and those of others—steel against wood.

COQUETRY, the match plate to "Constancy," published in the January number, will be given in the March number.

GOOD COUNSEL AND EVIL COUNSEL, match plates, engraved by Welsh, will also be published this year, with appropriate letter-press matter.

DRESS THE MAKER AND DRESS THE WEARER, emblematic pictures of *The North, The South, The East, The West*, are also in preparation. Also, the following

SCRIPTURAL SUBJECTS.

Search the Scriptures,
The Creation, in seven tableaux,
The Miracles of Christ, in four tableaux,
The Parables of Christ, in five tableaux,
"We Beseech Thee to Hear us. O Lord!" containing four figures,
Christ & the Woman of Samaria,
Christ Healing the Sick,
Christ on the Mount,
"How Beautiful are Thy Tabernacles, O Lord,
The Acts of the Apostles, in tableaux, from the cartoons of Raphael,
John, Proclaiming the Messiah,
The Separation of the Apostles,
Hallowed be Thy Name,
The Church Porch, Sunday Morning,
The Cottagers, Sunday Morning,
"Lord, have Mercy upon us,"
The First Lesson in Charity,
Backwoods' Worship,
"Suffer Little Childr'n to Come unto Me."
The Guardian Angel,
The Infant Saviour and St. John,
The Return of the Dove to the Ark.

And many, very many, of a more gay and lively character. One of each kind will be given in a number—combining the *grave and the gay*.

The illustration of the Scriptural Plates will be furnished by the REV. H. HASTINGS WELD.

COLORED ENGRAVING.

The "Sylphs of the Season," in the January number, was printed and colored in our own office; also the Vase and Flowers, in the February number. Can there be, has there been, anything more beautiful published, foreign or domestic, in any number of a magazine published in Philadelphia? We may ask the same question in reference to

GODEY'S RELIABLE FASHION PLATES,

Undoubted Receipts, Model Cottages, Music, Crotchet Work, Knitting, Netting, Patchwork, Crotchet Flower Work, Hair Braiding, Ribbon Work, Chenille Work, Lace Collar Work, Children's and Infant's Clothes, Capes, Caps, Chemisetts—in fine everything that can interest a Lady, will find an appropriate place in her own Book.

TERMS.—CASH IN ADVANCE, POSTAGE PAID, AND NO DEVIATION. They are also the terms of all the Philadelphia $3 magazines.

One copy, 1 year,.....$2	Five copies, 1 year,.....$10
Two copies, 1 year,..... 3	One copy, 5 years,..... 10
One copy, 2 years,..... 5	Ten copies, 1 year,..... 20

And one copy extra, for a year, to the person sending the club of ten.

☞ Postmasters, and others sending clubs, will oblige us very much by having them all addressed to one name. It is no inconvenience to them, and will be a great favor to us.

☞ No old subscriber will be received into a club until all arrearages are paid. Address L. A. GODEY,
No. 113 Chestnut St., Philadelphia.

Februaay, 1851.

Agricultural and Horticultural Implements, and Field and Garden Seeds.

UPWARDS of *one hundred* kinds of Plows, and a corresponding variety of all other implements for the farmer, planter, and gardner; embracing the largest and most complete assortment to be found in the United States. Also, Field and Garden Seeds—a large and varied assortment. A. B. ALLEN & CO.,
[8-tf-o] 189 and 191 Water st., New York.

New York Agricultural Warehouse and Seed Store.

A. B. ALLEN & CO., 189 and 191 Water street, New York, have constantly on hand, the most extensive assortment of the best and latest Improved Agricultural and Horticultural Implements, and Field and Garden Seeds ever offered for sale in the United States; embracing every Implement, Machine or Seed desirable for the Planter, Farmer, or Gardener. Also, Guano, Bone Dust, Poudrette, Plaster, &c. [2-3t-o]

Emery's Seed Planter,

FOR Planting all kinds of Garden Seeds by hand, in drills or hills, and so constructed as to be equally well adapted for planting Corn, Beans, Peas, &c., in drills or hills, and may be instatly gauged to any quantity of seed, and the hills any distance apart, from three inches to eight feet.

The Planter is taken by the handles, and moved before the operator as a wheel-barrow. The Planter makes its own furrow, measures the quantity of seed, deposits it in the ground, and a coverer and roller follows, which completes the whole operation as fast as a man or horse can walk. When the rows are three feet apart, from eight to twelve acres are planted per day, or an acre per hour, with a precision not before attained by any other Planter we have seen. In large fields and long rows, a horse is usually attached.

It has been very widely introduced throughout the country during four years past, and with an increased demand,—our orders the last season exceeding all previously sold. Price, complete, $14,00.

PLOWS.

The Eagle Plows, in great variety of sizes, including some new patterns added the last season to the assortment, and calculated for extra deep Sward work, and for Stubble land, capable of turning under any loose stubble, &c., on the surface.

Besides the above, we have had made, expressly for our Trade, two New Patterns—one calculated for harrow and deep work for lapping furrows, of easy draft, and capable of doing the best of work; the other is for lighter broken land, and very well adapted to flat work, if desired—well calculated for one team of horses, and a very favorite Plow where introduced. Several hundred were sold the past season, of the latter, and in no case have they failed to give satisfaction.

To our assortment we have added the various sizes of the celebrated Plows of Messrs. PROUTY & MEARS, of Boston—some sizes of which received the Society's highest premiums, at the Plow Manufacturers Convention and Trial, in June last.

Also, Cultivators of various kinds, and for different field crops. Harrows of several kinds, including the Geddes and Scotch forms of all sizes.

Field Rollers of various sizes and kinds, including one of 30 inches and one of 24 inches diameter, made of cast iron sectons 15 inches long; as many sections are suspended on a two-inch wrought iron shaft as are sufficiet to make the length of Roller required, usually six feet long. Price 30 inch, 5 sections, with frame, &c., for use, $50; of 24 inch, 5 sections, $35.

All the above machines, together with a very large and complete assortment of the best selected and valuable Implements of Husbandry, to be found in any similar establishment in the country, (many of the leading articles being made immediately under our own personal supervision.) All are warranted to come fully up to the representation.

For further particulars, prices, terms, &c., see our Descriptive Catalogues, containing upwards of one hundred finely executed engravings of our leading implements, together with descriptions, uses, prices, &c., furnished gratis, on application or by mail.

Albany Agricultural Works, Warehouse and Seed Store, No. 369 and 371 Broadway. EMERY & CO
Albany, Feb. 1, 1851.

Fruit Scions for 1851.

THE subscriber will furnish Scions of the justly celebrated Fruit of Western New York, of the different varieties mentioned below.

Northern Spy,	*Wagener,*
Norton's Melon,	*Swaar,*
Early Joe,	*Westfield Seek-no-further,*
Baldwin,	*Rambo,*
Ribston Pippin,	*Esopus Spitzenberg,*
Red Canada,	*Roxbury Russett,*
Gravenstein,	*Autumn Strawberry*
Red Astrachan,	*Green Sweeting,*
Lowel,	*Munson Sweeting,*
Dyer,	*Talman Sweeting,*
Porter,	*Summer Rose,*
Fameuse,	*Early Harvest,*
Yellow Bellflower,	*Hawley or Douse,*

St. Lawrence.

I will pack and send, at One Dollar per hundred, either by mail or express.

I refer to Mr. Vick, of the Gen. Farmer. All orders must come post paid.

Virgalieu, Osband's Summer, Onondaga or *Swan's Orange*, pear Scions, at Three shillings per dozen.

☞ In all cases where it is possible, I will send specimens of the *Northern Spy* apple. JAMES H. WATTS.
Rocheste, Feb., 1851.

1851 ROCHESTER 1851

STAINED GLASS WORKS.

I AM now prepared to produce upon Glass, the copy of any *Design, Picture, Figure or Ornament*, ancient or modern, Enamelled, Embossed, Painted or Stained.

Lead Sash, and Diamond Glass, for church or cottage windows, supplied to order. M. F. REYNOLDS.
February, 1851.

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To Fruit Growers and Nurserymen.

ELLWANGER AND BARRY solicit the attention of all tree planters, Nurserymen and Dealers to their present stock, which is much larger and better than they have ever before had the pleasure of offering.

It embraces, among other things, in large quantities,

Standard Fruit Trees, of all sorts.
Dwarf and Pyramidal Fruit Trees, for Gardens.
Gooseberries, Strawberries, Raspberries, Currants, &c., all the newest and best kinds.
Ornamental Trees, Shrubs, Roses, &c., including all new, rare and desirable articles.
Buckthorn, Osage Orange and other Hedge Plants.
Stocks of all sorts for Nurseries.
Green House, Border and Bedding Plants.
Double Dahlias, &c., in immense quantities.

Wholesale prices furnished when desired.

A new edition of the general descriptive Catalogue is now ready and will be sent gratis to those who apply post paid.

Mount Hope Garden and Nurseries,
Rochester, N. Y., Sept. 1, 1850.

Morgan & Wilson, Dentists,

OFFICE, corner of North St. Paul and Main streets, second story, beg leave to inform their friends and all those desirous of obtaining first class of operations upon the teeth, that they have again associated themselves together, and are in every way prepared to insert teeth on gold plate, from one to an entire set, or repair the decayed natural organs, with gold fillings, so as to preserve them during life.

To the Profession they would say, they have a large assortment of Alcock s Mineral Teeth, Gold Plate, Spiral Springs, and quantities of Morgan's Premium Gold Foil, constantly on hand.

Orders by mail filled at sight.

They can sell Teeth 30 per cent. less than they can be bought elsewhere in the city

Specimens of their Plate Work can at all times be seen at their office.

☞ Just received a large stock of Alcock's premium gum and single Teeth, which they are selling at New York prices.

A. A. MORGAN. E. F. WILSON.

☞ Office, corner North St. Paul and Main streets.
Rochester, November 1, 1850.

GUANO.

WE are in daily expectation of arrivals of Peruvian Guano. Those wishing to order, will do well to do so at the earliest moment. A. B. ALLEN & CO.

New York Agricultural Warehouse and Seed Store, 189 and 191 Water street. [2-3t-o]

Two Farms for Sale in Fairfax County, Va.

WE ARE authorized to sell a Tract of Land in the county of Fairfax, containing 217 acres, about 30 of which is covered with timber, comprehending several varieties of Oak, Poplar, Hickory, &c. There is also a wood lot of 18 acres. Of the cleared land, about 100 acres is considerably improved, as is shown by the crops now on it. The orchard of about 12 acres, is most thrifty—the fruit various and select. The place is watered by a stream, the two branches of which are covered with timber for a mile or two above, and which, within the limits of the farm, has a fall of 17½ feet clear, being amply sufficient for a saw mill during seven or eight months of the year, and would suffice for a family grist mill The buildings consist of a dwelling house containing six comfortable rooms, besides the garret, two cellars, a store room, kitchen, servant's room, &c.; a comfortable farm house sufficient for the manager's family and the farm laborers; also a large new frame barn, 58 by 32 feet, with 16 feet posts. This farm is about two miles from the Falls Church, eleven miles from the city of Washington, ten miles from Alexandria, and 8 from Georgetown, by the nearest road. It is well watered and remarkably healthy.

The second Tract contains 167 acres, and is situated two miles east of Fairfax Court House, Va., and about equal distances from the cities of Washington, Georgetown, and Alexandria, viz., fourteen miles. There is about 50 acres of timber upon this tract, and about 20 in small Pines and scattering forest trees, the balance being nearly cleared and in good condition for cultivation. It lies in a desirable part of the county, and on the line of a proposed plank road, in a direct line from Fairfax Court House to Georgetown. The dwelling house is comfortable, and a good milk house and other out buildings are on the place, a good well of water at the door, and the farm well watered otherwise; with an abundant supply of good fruit, such as apples, cherries, peaches, &c. The land is divided, unequally, into nine lots, fenced with rails mostly new. Adjoining this tract is a new and improved saw mill, at which there is a market for all kinds of lumber. Any person visiting Fairfax Co. will find it to their advantage to call on the subscriber, when they can be informed of other tracts if either of the above did not suit.

For further particulars apply personally, or by letter, to the undersigned, at Fairfax Court House, Va.

Letters directed to "Fairfax News," Fairfax Court House, Va., postage paid, will recive a prompt reply. H. FULLER.

Fairfax Court House, Va., Sept. 21, 1850. THOS. R. LOVE.

School of Applied Chemistry, Yale College, New Haven

JOHN P. NORTON, PROF. OF SCIENTIFIC AGRICULTURE.

STUDENTS are received in this Laboratory as a special class, distinct from the other College departments, and instruction is given in all branches of Chemistry, both organic and inorganic, general and special.

Every facility is afforded to those who desire to study Scientific Agriculture generally, or the analysis of soils, plants, animal substances, manures, &c. Students fitted to become instructors in this branch of science.

A course of Lectures, upon Scientific Agriculture, by Prof Norton, will commence about the middle of January, and continue two and a half months. This course is intended to present a plain and intelligible view of the connections of Science with Agriculture, which may be understood by any farmer.

The Lectures of Prof. Silliman on Geology and Mineralogy, and those of Prof. Olmsted on Nat. Philosophy, Astronomy and Meteorology, also the College Libraries and Cabinets, are accessible to the students.

For information as to terms, &c., apply to Prof. Norton.
Nov. 1, 1850. [11-4t]

The Practical and Scientific Farmer's Own Paper.

THE GENESEE FARMER,

A MONTHLY JOURNAL OF

AGRICULTURE AND HORTICULTURE,

ILLUSTRATED WITH NUMEROUS ENGRAVINGS OF

Farm Buildings, Domestic Animals, Implements, Fruits, &c.

VOLUME XII. FOR 1851.

DANIEL LEE & JAMES VICK, Jr., EDITORS.

P. BARRY, Conductor of Horticultural Department.

Fifty Cents a Year, in Advance.

FIVE Copies for $2; Eight Copies for $3, and any larger number at the same rate.

☞ All subscriptions to commence with the year, and the entire volume supplied to all subscribers.

☞ POST-MASTERS, AGENTS, and all friends of improvement, are respectfully solicited to obtain and forward subscriptions.

Subscription money, if properly enclosed, may be sent (post paid or free,) at the risk of the Publisher. Address to

DANIEL LEE,
December, 1850. *Rochester, New York*

STEREOTYPED BY JEWETT, THOMAS AND CO., BUFFALO, N. Y.